MISSOURI BOTANICAL GARDEN

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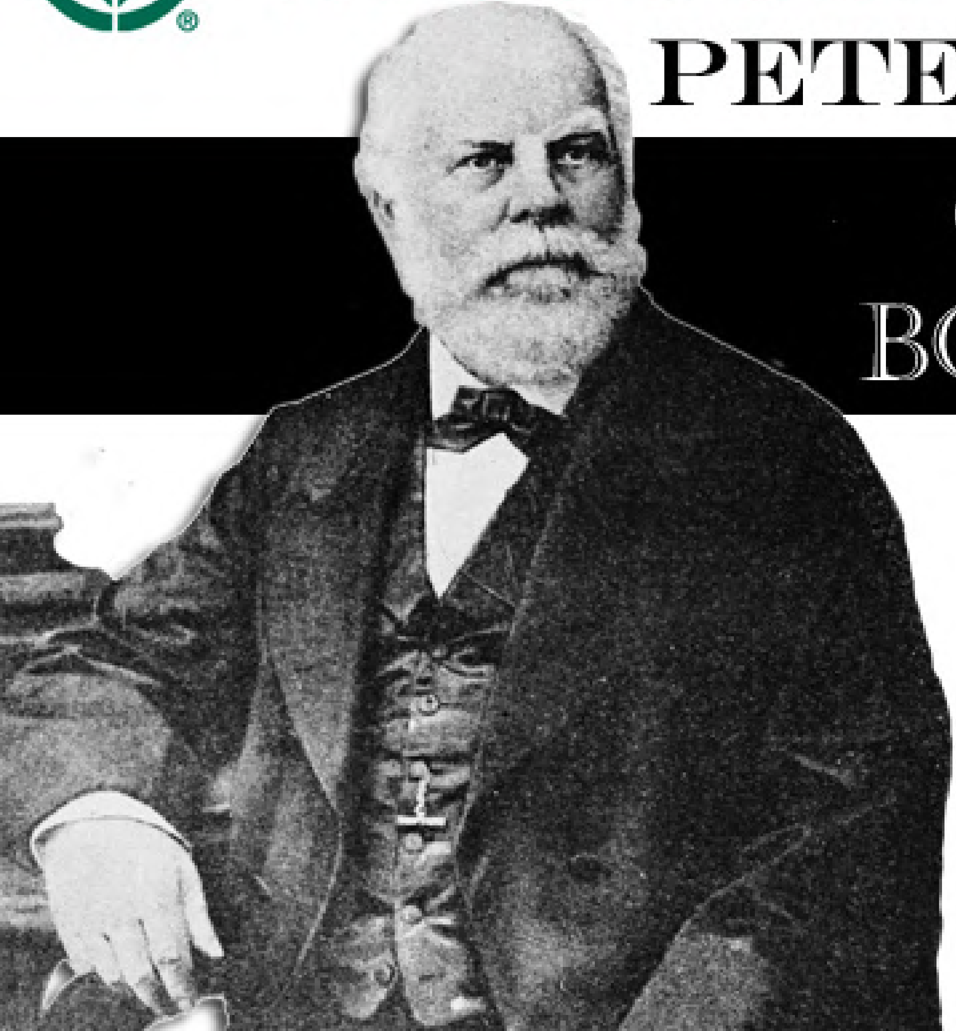
GEORGE ENGELMANN BOTANICAL NOTEBOOKS



Pagination Note:
Since many of the items lack a specific page number, the page number displayed online refers to the sequentially created number each item was given upon cataloging the materials.

SHOUT
SHARE
IT

1, broad 2, high Callitriche Asa Grayi

Microcarpa , genuina

heterophylla	linearis	brevifolia
Wright Texas, Hb Gr. – 0.7-0.6		
— — Hb Torr 0.8-0.8		Mamelle, Ark G.E. 0.8-0.8
Louisiana, Hale 0,8-0.7		Louisiana, Hale 0.7-0.7
Chicago, [illegible] 0.7-0.6		Galveston Lindh 0.8.0.8
Palisades Austin 0,8-0.8	Sand Lake, Allen Austin 0.7x0.8	
Athens Hall 0.7-0.6	Athens, Hall -0.8x07	Louisiana Hale (capsules) 0.7-0.7
Connecticut Eaton Hb Gr. 0.8-0.7	Augusta Mead 0.7-0.7	
	Florida Rugel 0.7-0.7	
	setacea Raf 0.8-0.8	
St Louis Geyer 0.8-0.7	Brooklyn — 0.8-0.7	Am bolto 0.8-0.7
New York Austin 0.8-0.7	New Jersey Austin 0.8-0.8	Louisiana Pek Hook 08-0.7
gigantea 0.8-0.7		
	Deerfield Mass 0.8-0.8 -0.7	Alabama Buckley 0.8-0.7

813

0 1 2 3 4 5 6 7 8 9 10
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APOTHECARY & PHARMACEUTIST,
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813A

so much interest among scientific men.* And such was his energy that, almost unaided, he gathered in a few weeks the extensive collection of fossil bones which furnished to Dr. Leidy the materials for his splendid memoir on the "Extinct Fossil Fauna of Nebraska." At the same time he collected a large and elegant series of Cretaceous fossils, some of which were described and figured by Dr. Owen in his final report on the Geology of Iowa, Wisconsin and Minnesota. The notes made by Dr. Evans on the geological features of that remarkable region were likewise of the highest interest, and from these Dr. Owen has compiled one of the most instructive and beautiful chapters to be found in his valuable report. In addition to his scientific duties, Dr. Evans had almost exclusive control of the business department of Dr. Owen's survey, which of itself involved an immense deal of labor. The satisfactory manner in which he discharged these onerous duties, often in the midst of disheartening privations and even danger, commanded the highest esteem and confidence of Dr. Owen and his associates, while his goodness of heart, uniform courtesy, and self-sacrificing disposition, secured to him their warmest friendship.

After the completion of the field work of the North-west Survey, (1850,) Dr. Evans received the appointment of U. S. Geologist for Oregon, which he accepted, and immediately entered upon the duties of his new office with his usual energy and zeal. The survey was organized by the appointment of Dr. B. F. Shumard to the position of Principal Assistant, who shortly after embarked for Oregon, by way of the Isthmus of Panama. Dr. Evans determined to revisit Nebraska, and thence proceed overland to Oregon by an unexplored route, with the view of determining the general geological and topographical features of a vast region, then almost unknown to science, and of ascertaining if there existed a nearer way from the Upper Missouri to the Oregon coast than that usually travelled. He proceeded to St. Louis, and there spent a few days in making preparations for his journey. He then took passage for Fort Pierre Chouteau, on board a steamer belonging to the American Fur Company. During this passage, which occupied nearly a month, cholera to an alarming extent prevailed among the passengers and employees of the Fur Company on board, several of whom died, and the mortality would have been far greater but for the kind attention of Dr. Evans, who, though himself laboring under an exhausting diarrhœa, allowed himself no rest, but in the triple capacity of physician, nurse and companion, was ever at the bed-side of the sick, administering to their wants, and encouraging them by his cheering words.

From Fort Pierre, Dr. Evans again visited the Mauvaises Terres, where in a short time he succeeded in obtaining a large collection of the fossil fauna of that region, even more extensive than his former one, and embracing a considerable number of new and interesting species. On his return to the Fort he set about preparing for his long journey, which from the hostility of the Blackfeet and other Indian tribes, together with the difficulties incident to the route, was regarded by the Indian traders as extremely hazardous; hence it was exceedingly difficult to find either guides or hunters willing to accompany him. After much persuasion, however, he succeeded in procuring the services of two hunters and a half-breed guide, they agreeing to go with him as far as the Flathead Village. With this meagre escort he started from Fort Pierre, but scarcely had he reached the borders of the Blackfeet country ere his hunters became alarmed, and unceremoniously left his camp during the night and returned to the Fort. Under these discouraging circumstances a person less courageous than Dr. Evans would have turned back; but difficulties served only to develope the indomitable

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* To Dr. Hiram A. Prout is justly due the credit of having first called attention to the existence of such remains in that region by his excellent memoirs of Palæotheroid and other bones, published in Silliman's Journal.

12-24

Callitriche Asa Grayi

genuina microcarpa

fruit 0.7-0.8 mm broad
and usually 0.6-0.7 mm
rarely nearly 0.8 mm
high

energy of his character, and with but a single man as his escort, and no other guide than his compass, he determined to continue on his course. After a wearisome travel of many days, and having encountered many privations and dangers, he and his companion, Cadotte, arrived safely, but in almost a starving condition, at the Flathead Village, situate on the western slope of the Rocky Mountains. In accomplishing this part of his arduous task, Dr. Evans passed directly through the heart of the Blackfeet country, and travelled a distance of more than two hundred miles in the main chain of the Rocky Mountains before he succeeded in finding a passage to the valley beyond. It is much to be regretted that the credit of the discovery of this important pass, which unquestionably belongs to the subject of the present sketch, has been unjustly transferred to another. It should have been named in honor of Dr. Evans instead of Cadotte, since it is well known that the latter person had no knowledge of such a passage, and, in fact, had not even been in that region before he went there under the guidance of Dr. Evans. After a few days' rest at the Flathead Village our traveller resumed his journey, and without encountering further difficulties, reached Oregon city with much valuable information concerning the extensive district of country through which he had passed.

In the prosecution of the geological survey of Oregon and Washington, Dr. Evans was actively engaged for nearly five years, during which period his travels extended over a large portion of those Territories. The results of his important labors, embracing a large amount of information relating to the geology, topography, geography and natural history of that interesting portion of the American continent, are embodied in his large report submitted to, and ordered to be printed by Congress at its last session. It was placed in the hands of the Public Printer only a few days previous to the death of its lamented author, and it is a matter of deep regret, that, owing to some informality, its publication must be delayed to await the further action of Congress. It is earnestly hoped that Congress will, at an early period, make the necessary provision for the printing of this important document, the preparation of which has cost such a large expenditure of labor and money, and which promises to be of the highest value to science and the people for whose benefit the survey was ordered.

September 2, 1861.

The President, Dr. **Engelmann**, in the chair.

Seven members present.

The following donation to the library was received: Bull. de la Soc. Imper. zool. d'Acclimatation, Paris, No. 7, Juillet, 1861, *from the Society*.

Mr. Holmes presented from Dr. B. F. Shumard the following skulls from Texas: *Felis pardalis*, Linn. (Tiger-cat), from Travis Co.; *Felis onza*, Linn. (Jaguar), from Hays Co., and *Dicotyles torquatus* (Peccary), from Travis Co.

Dr. Engelmann made some remarks on the temperature and humidity of the past three summer months. June and August were by more than two degrees warmer than the averages for these months, while July was cooler. The quantity of rain for each of these months was below the average

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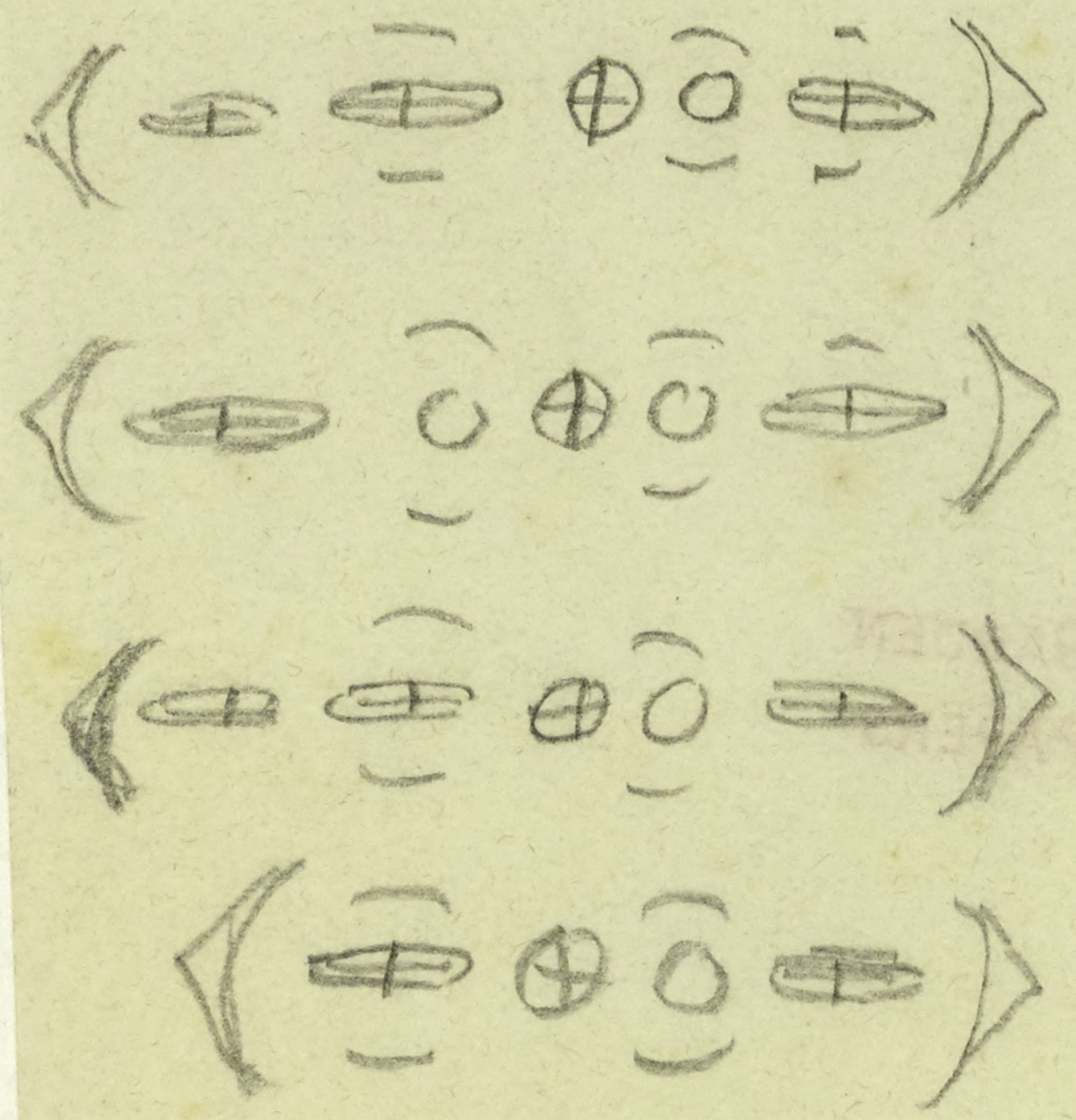
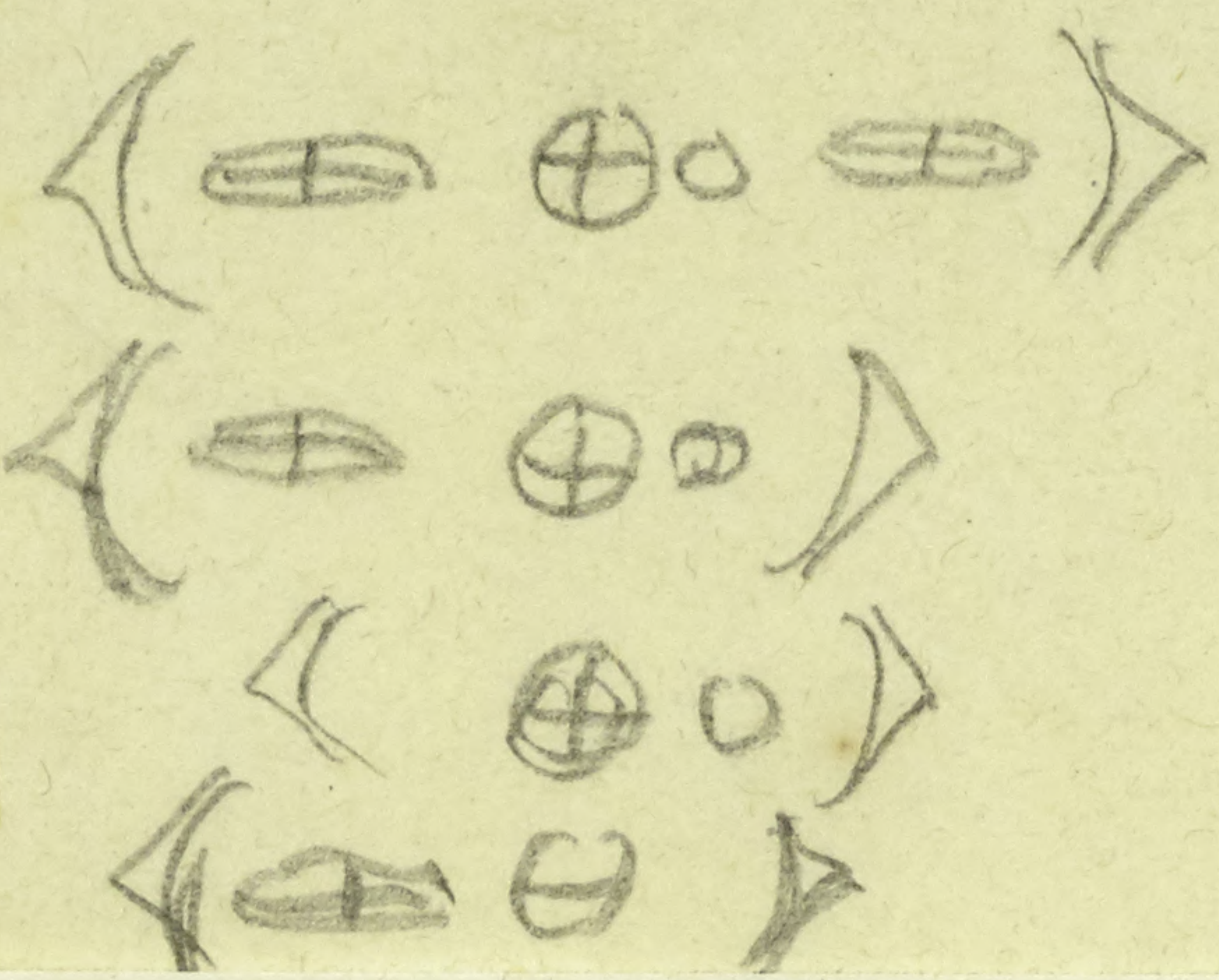
Callitriche Asa Grayi Octob 4d 1864

aquatica, latifolia .. Athens Ill.

814


quite rare
rarer
very comm
usual

aquatica angustifolia submersa


often
common
rarer

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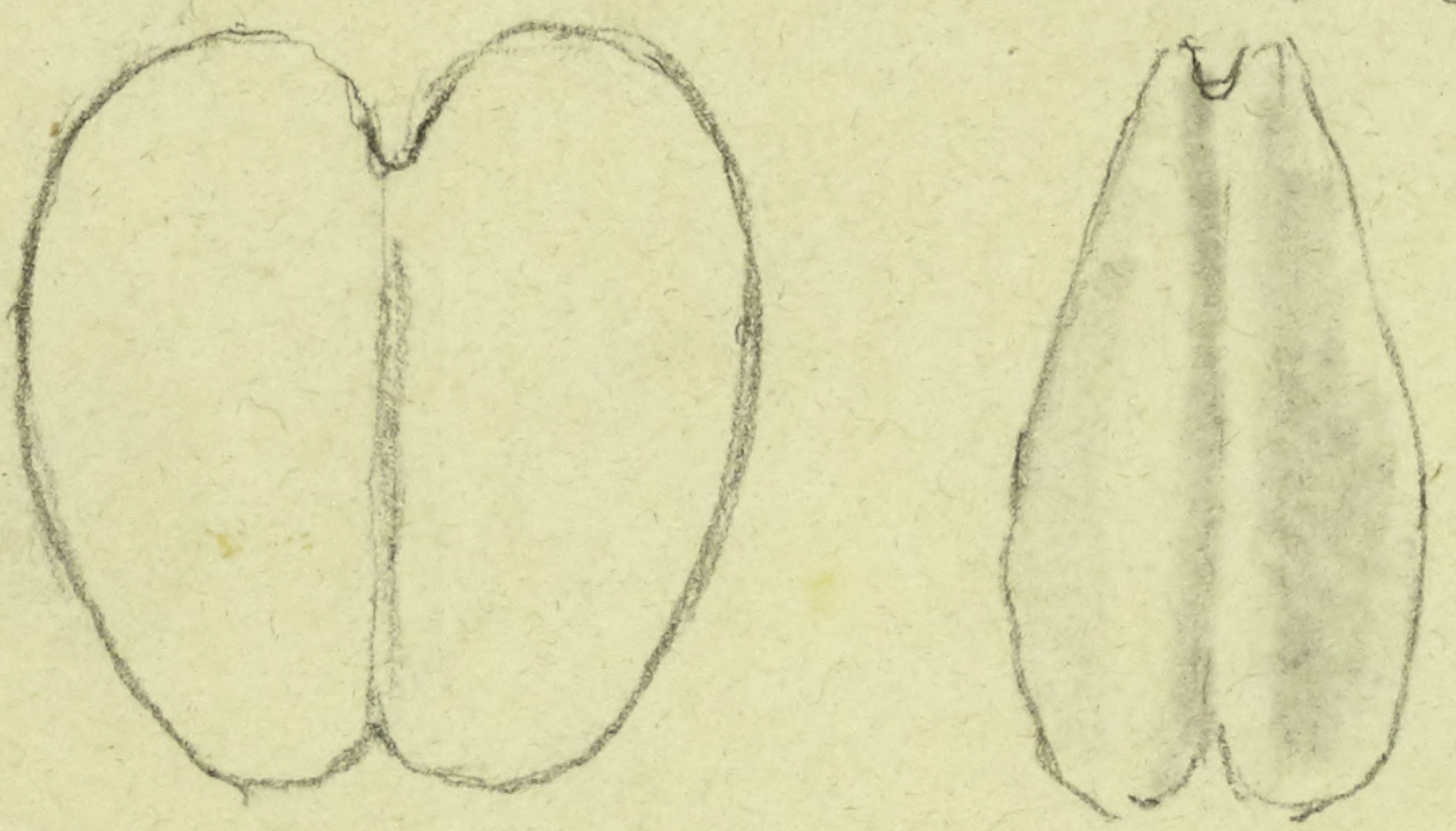
"Call. verna
var. Linnaei"

March 15 1865

Bergen Co N Jersey

C. F. Austin in Herb Torr.



$\frac{24 \times 25}{30}$ = 0.8 × 0.8 mm

leaves in some specimens
only 3–5 mm long,
in others 10–15 mm long

same from Williamsburg Long Island, in Hb Torrey

815

same also (ibid) with the printed label:

Call. verna Linn Torr fl. N.Y. 2 p. 170
var terrestris Torr
C. terrestris Raf
Water Chickweed

Same with transverse
fruit 0.8 × 0.7 mm
Cape May Co N Jersey
March 1859 C F Austin
Hb Torrey

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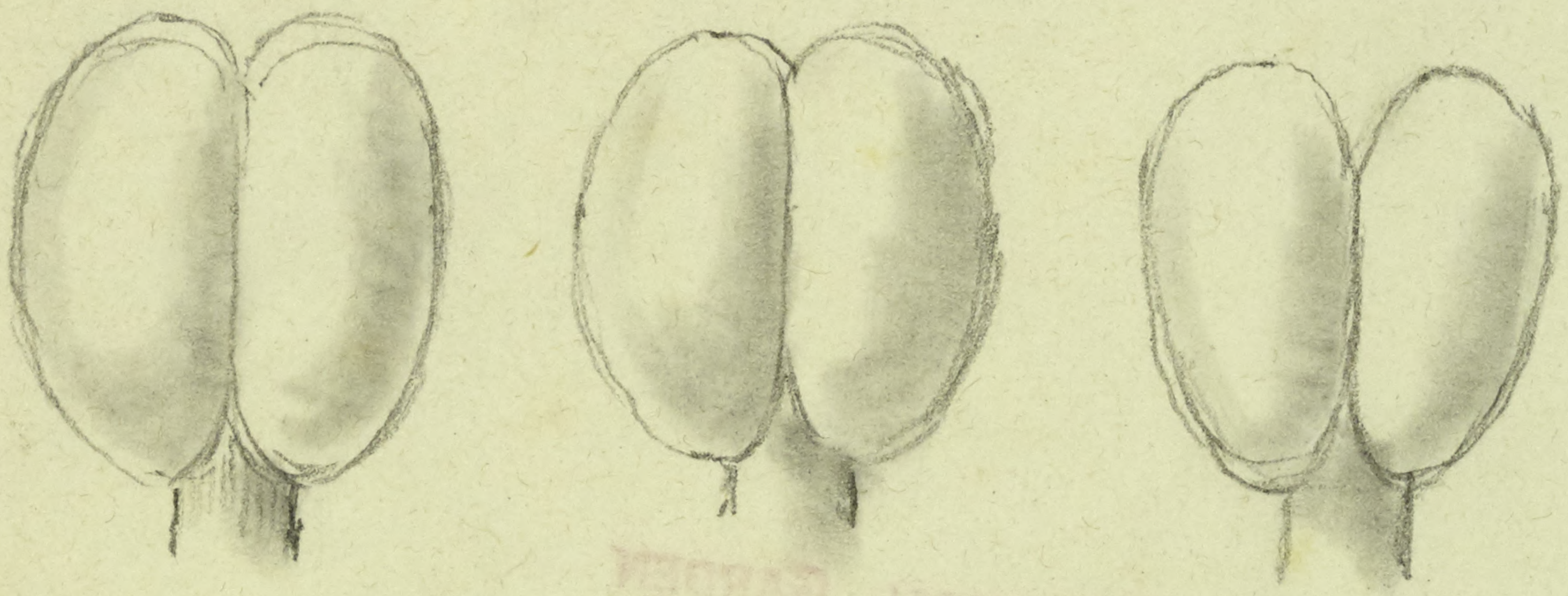
Callitriche

Sand Lake near Albany N.Y.

Oct 4 1864

Ch. Peck 1864

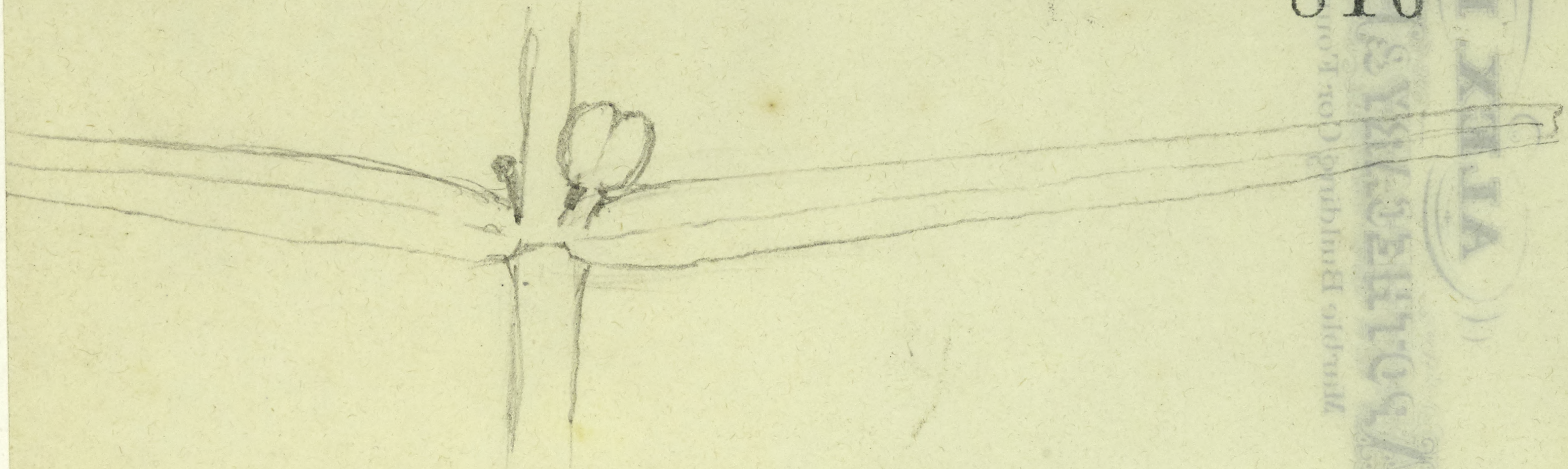


$$\frac{20-21 \times 22-23}{30} = 0.7 \times 0.8 \text{ mm}$$

$$\frac{22-23}{30} = 0.7-0.8 \text{ mm}$$ high

by $\frac{21}{30} = 0.7$ mm broad

816



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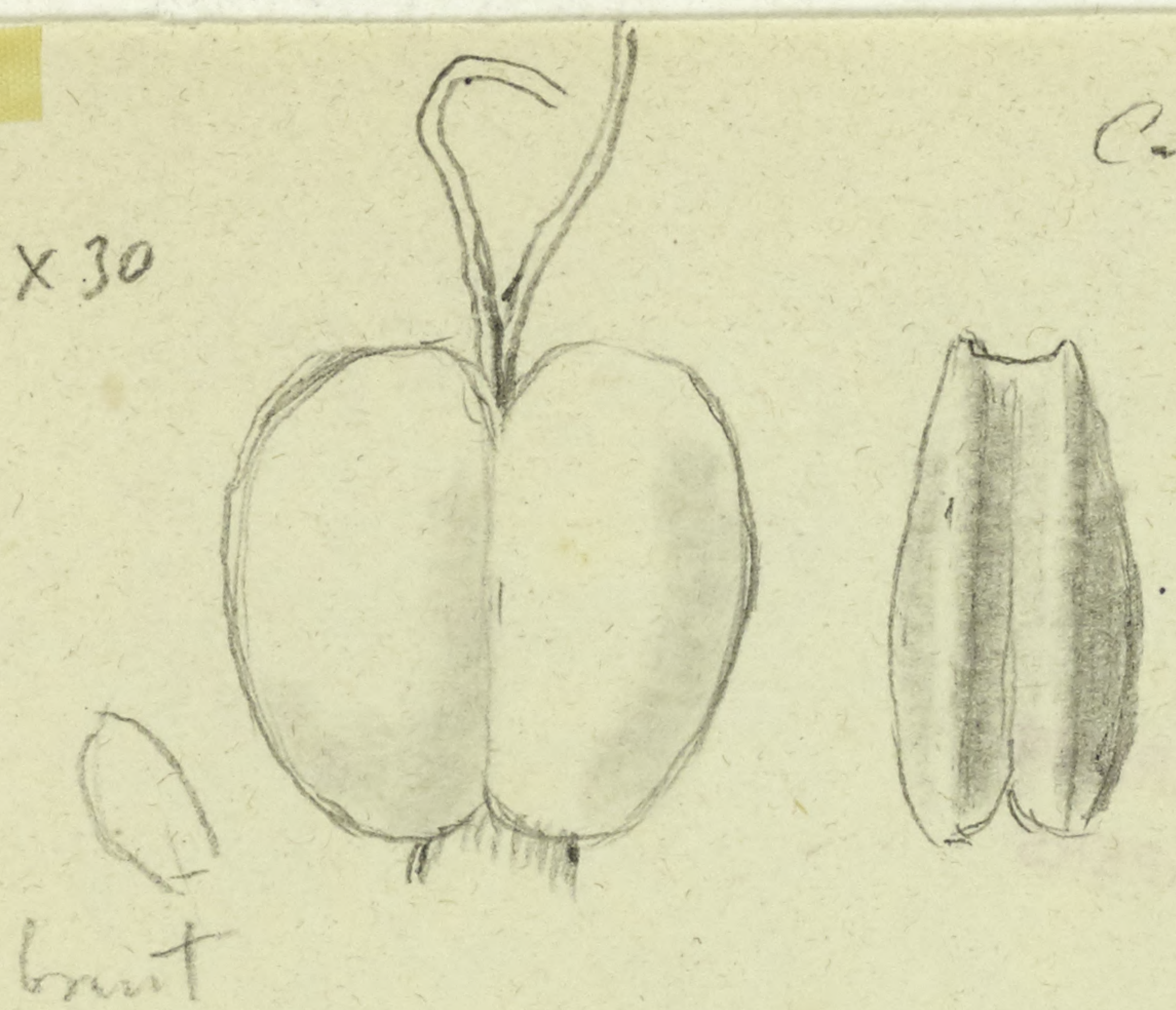
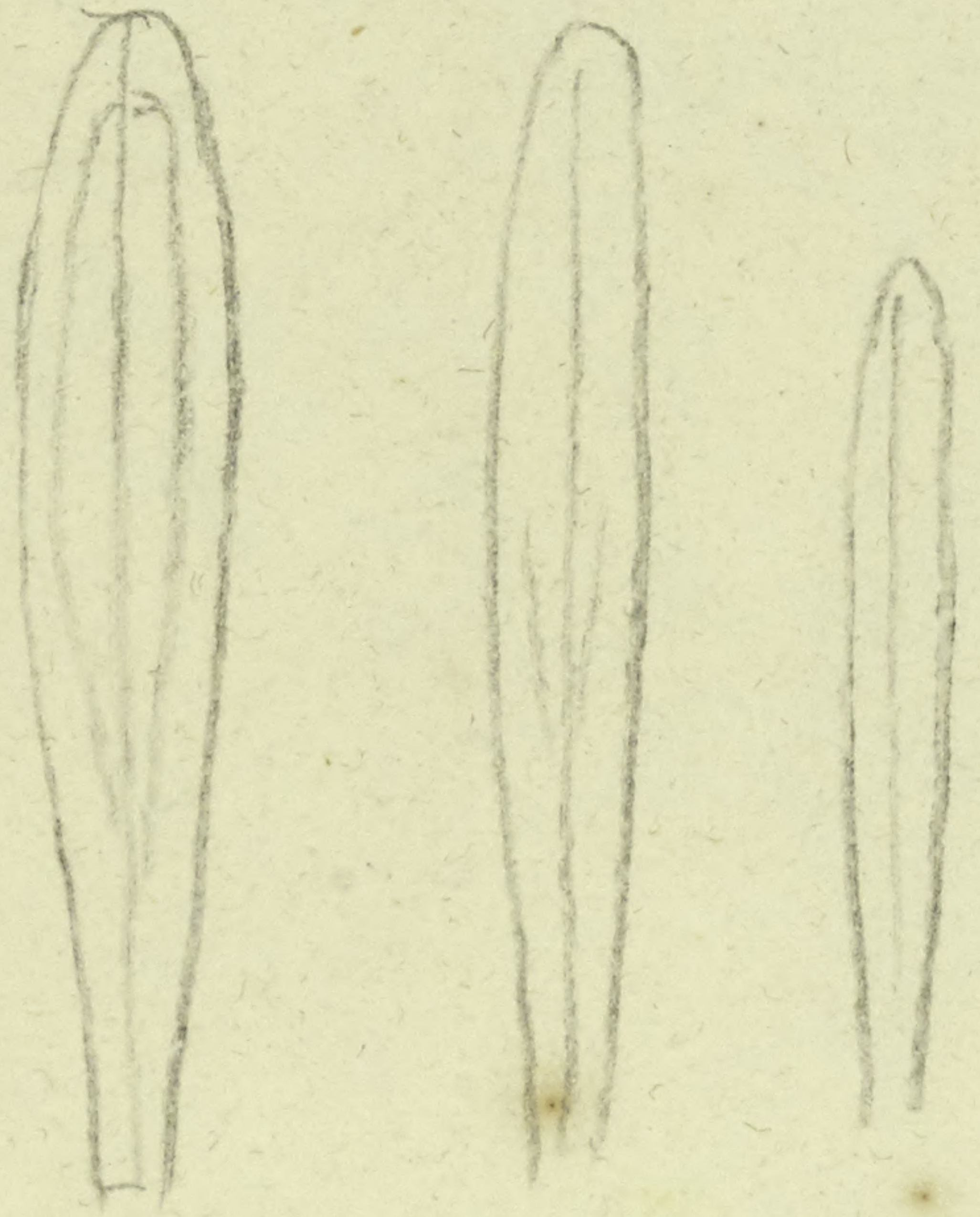
Call. Asa Grayi Octob 11 1864
terrestris

Hale, Louisiana, sub nom
et mixta cum Call peploides



Keels a little sharper and
more distant, than usual

$\frac{225 \times 215}{300} = 0.7 \times 0.7$



817

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Callitriche

Jan 25 1864

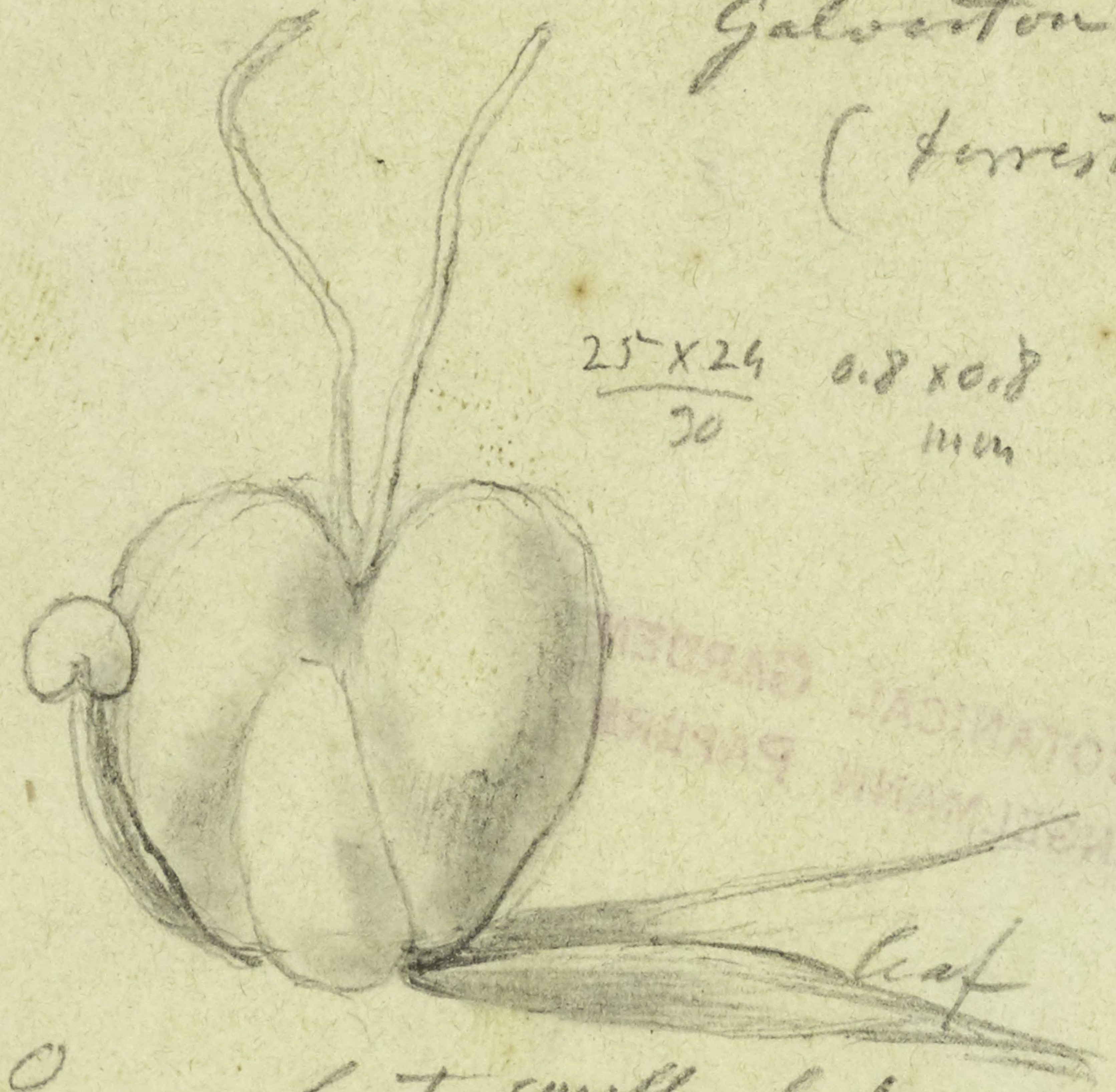
Galveston May 1843 with C. peploides

(terrestris)

Lindheimer leg

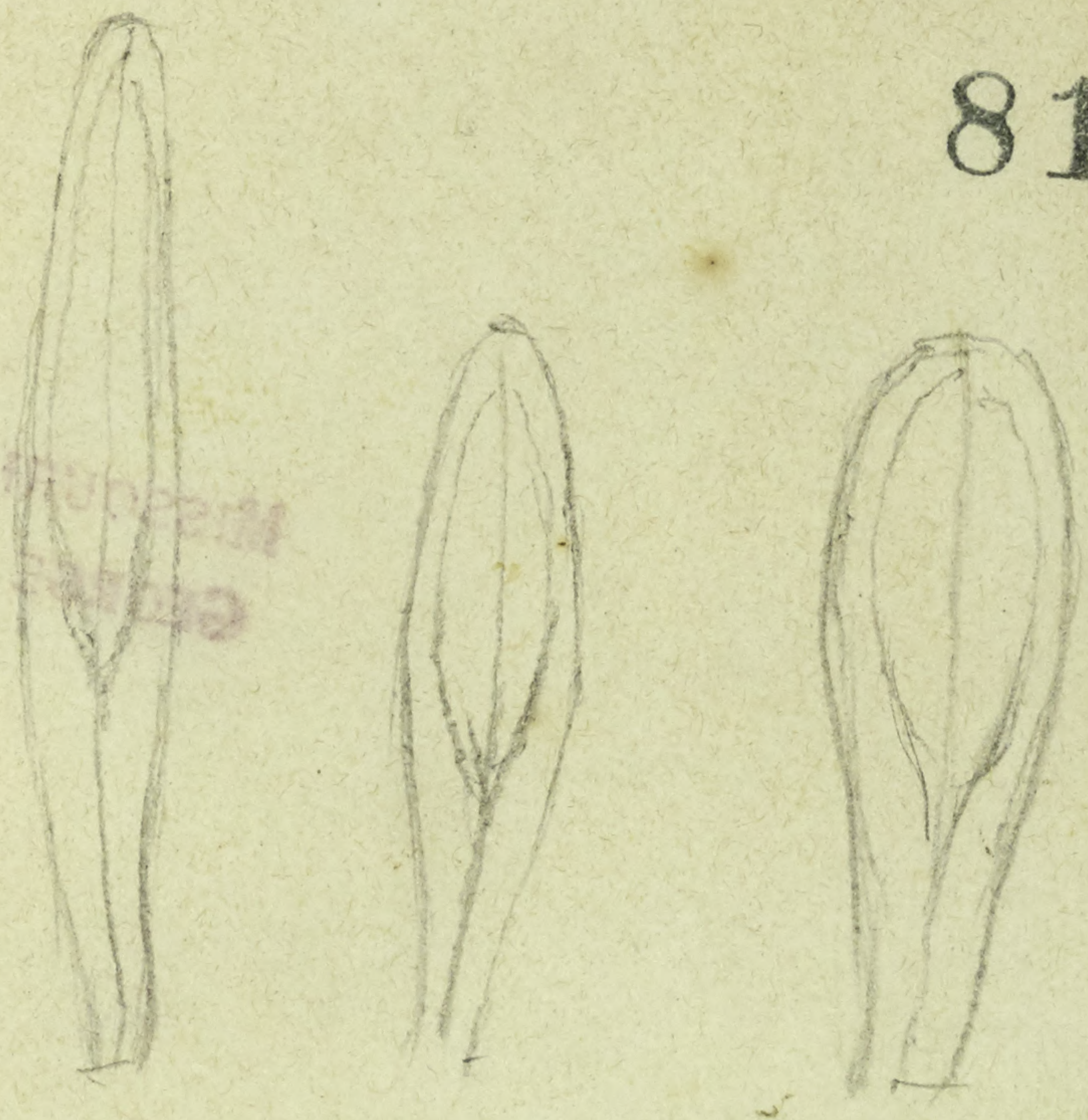
818

25 x 24 / 30   0.8 x 0.8 mm



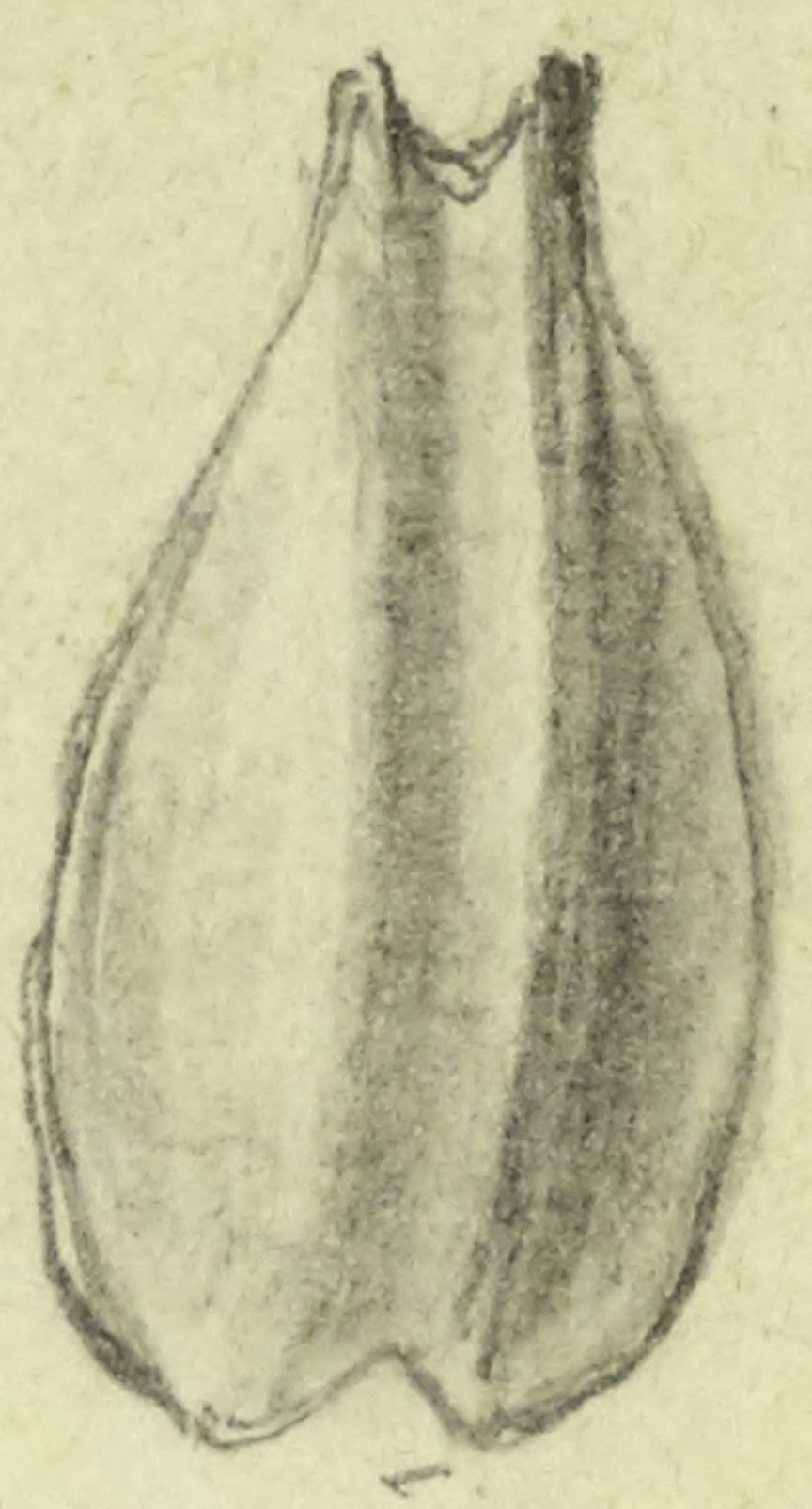
X 30

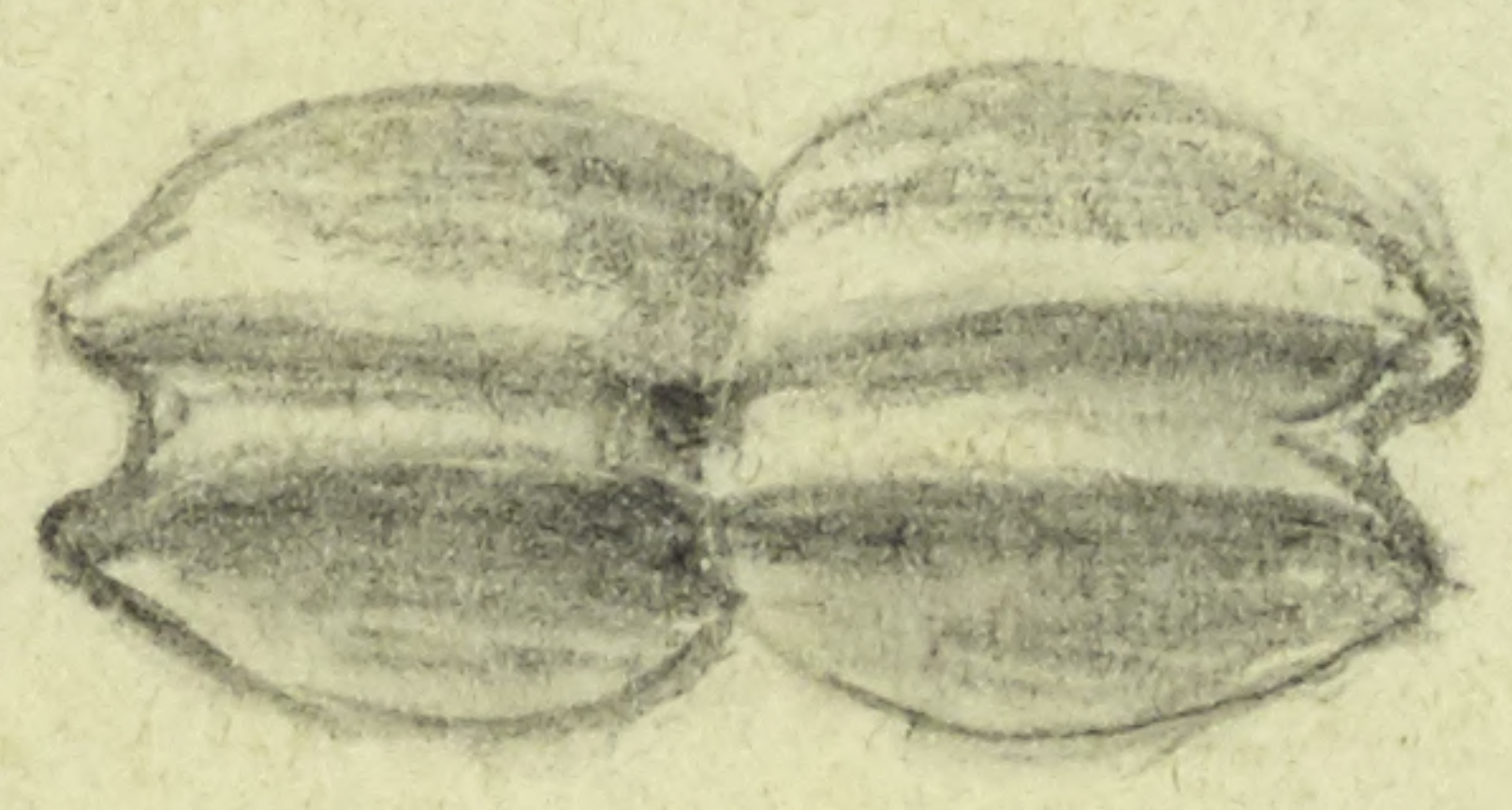
bracts small but distinct.

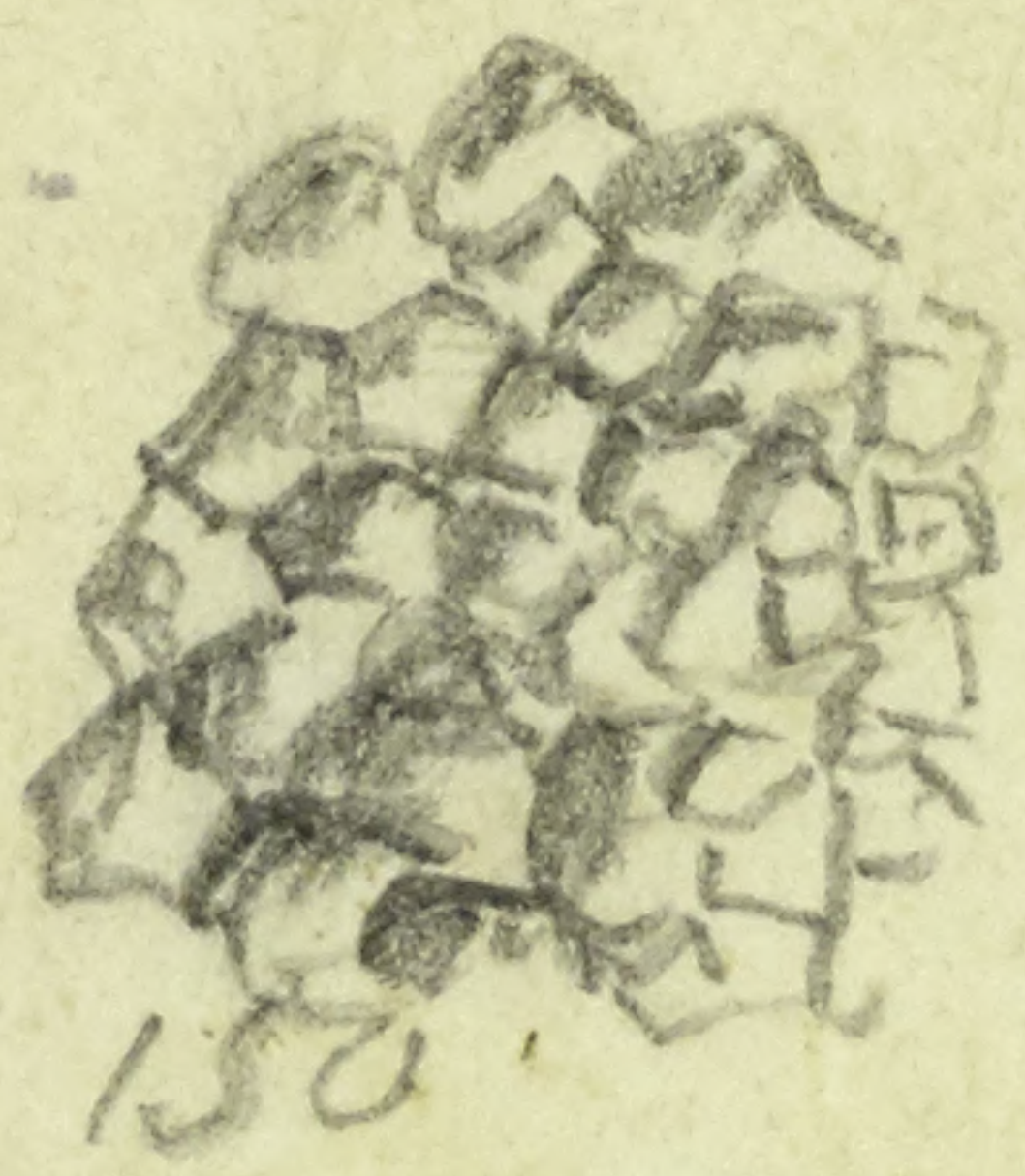


lower   upper leaves

x 10







Surface of nut reticulate

x 150

Styles distinct (not connate at base) at last adhering to single separated carpelles or nuts

0 1 2 3 4 5 6 7 8 9 10
cm
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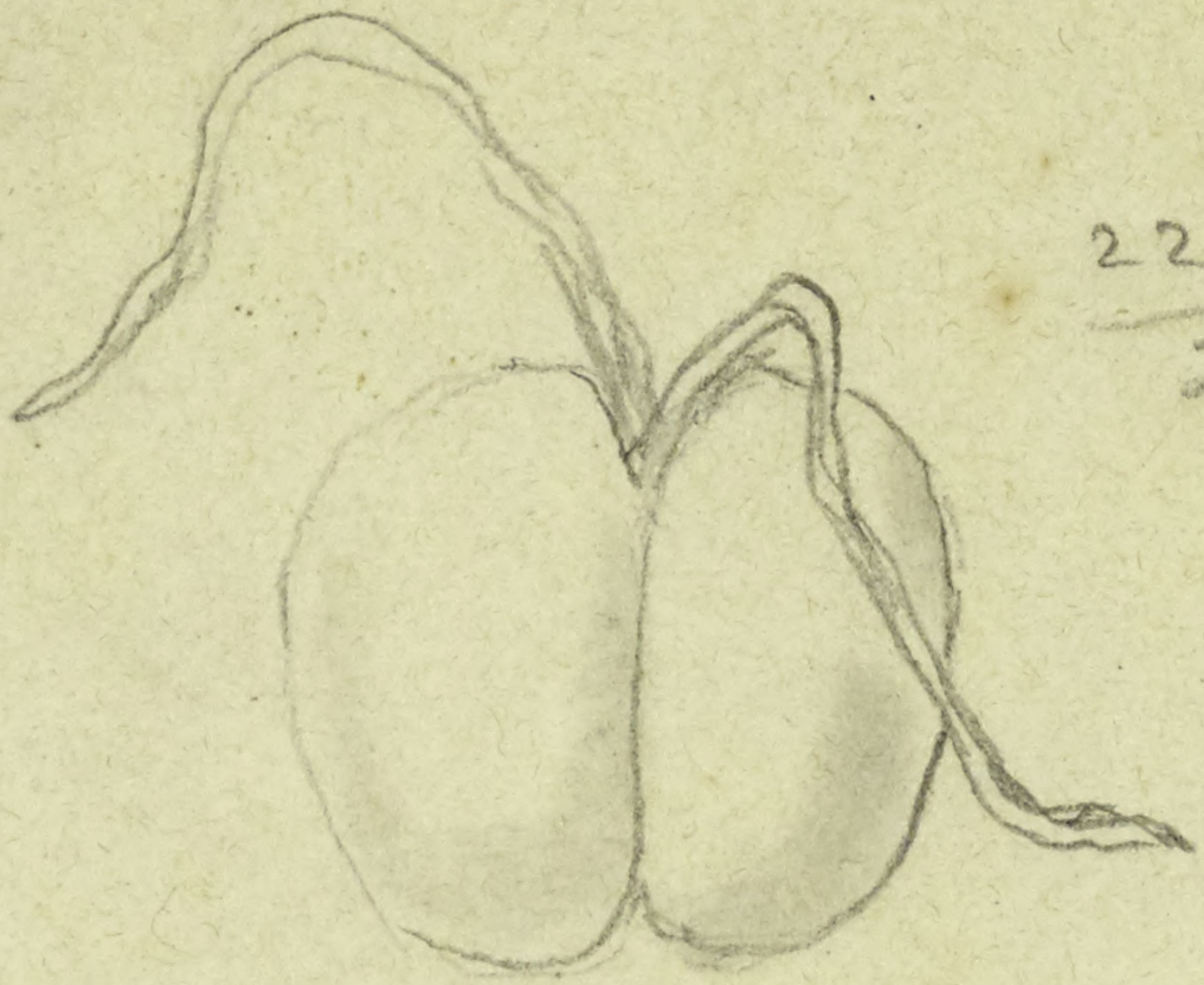
318

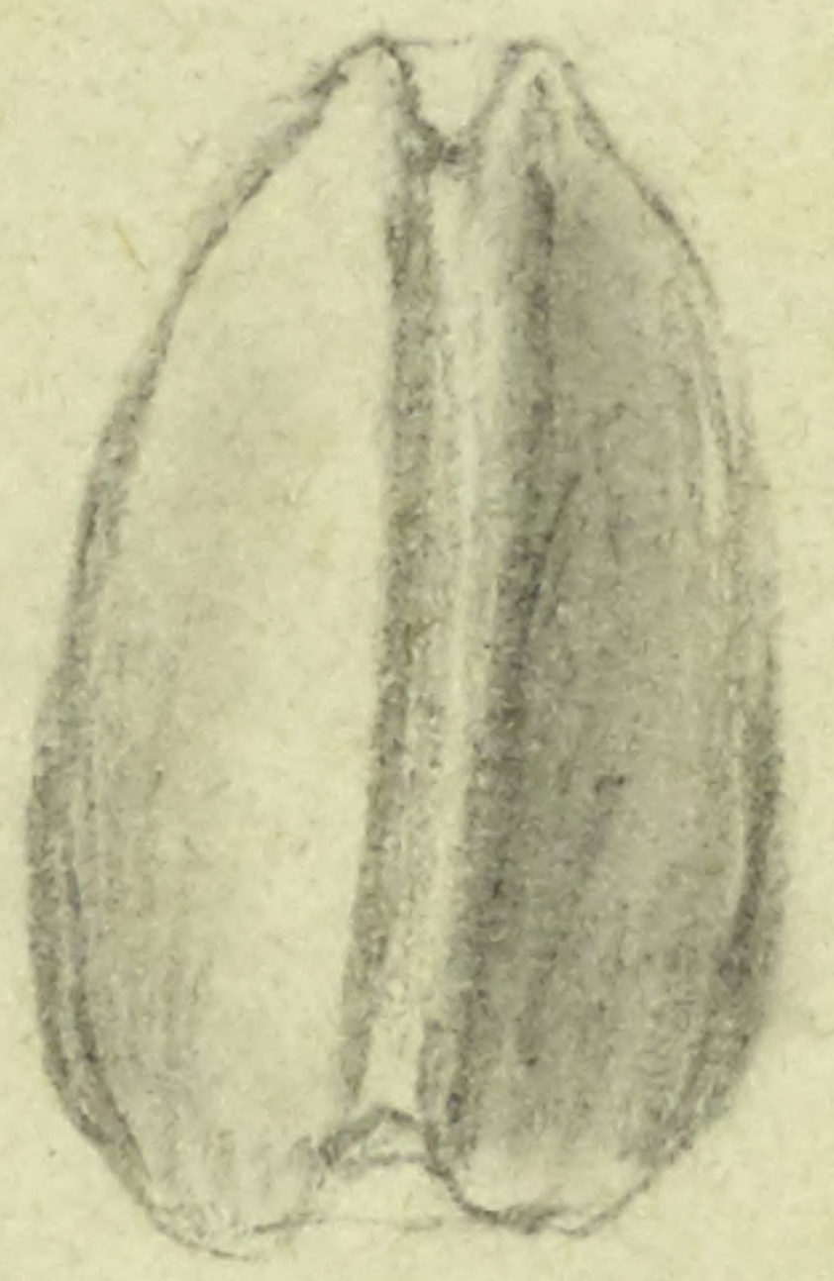
Callitriche June 27 1864

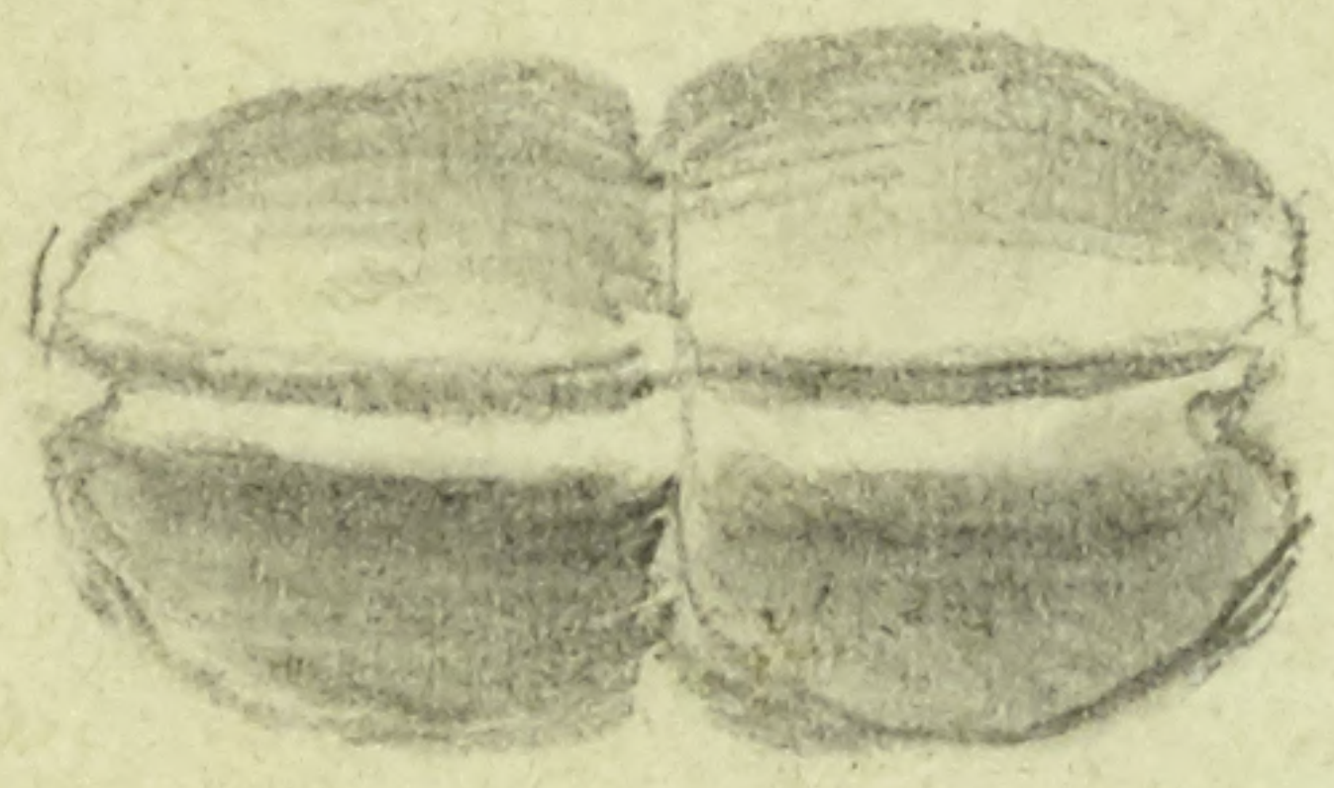
Fendler, Chicago 1848

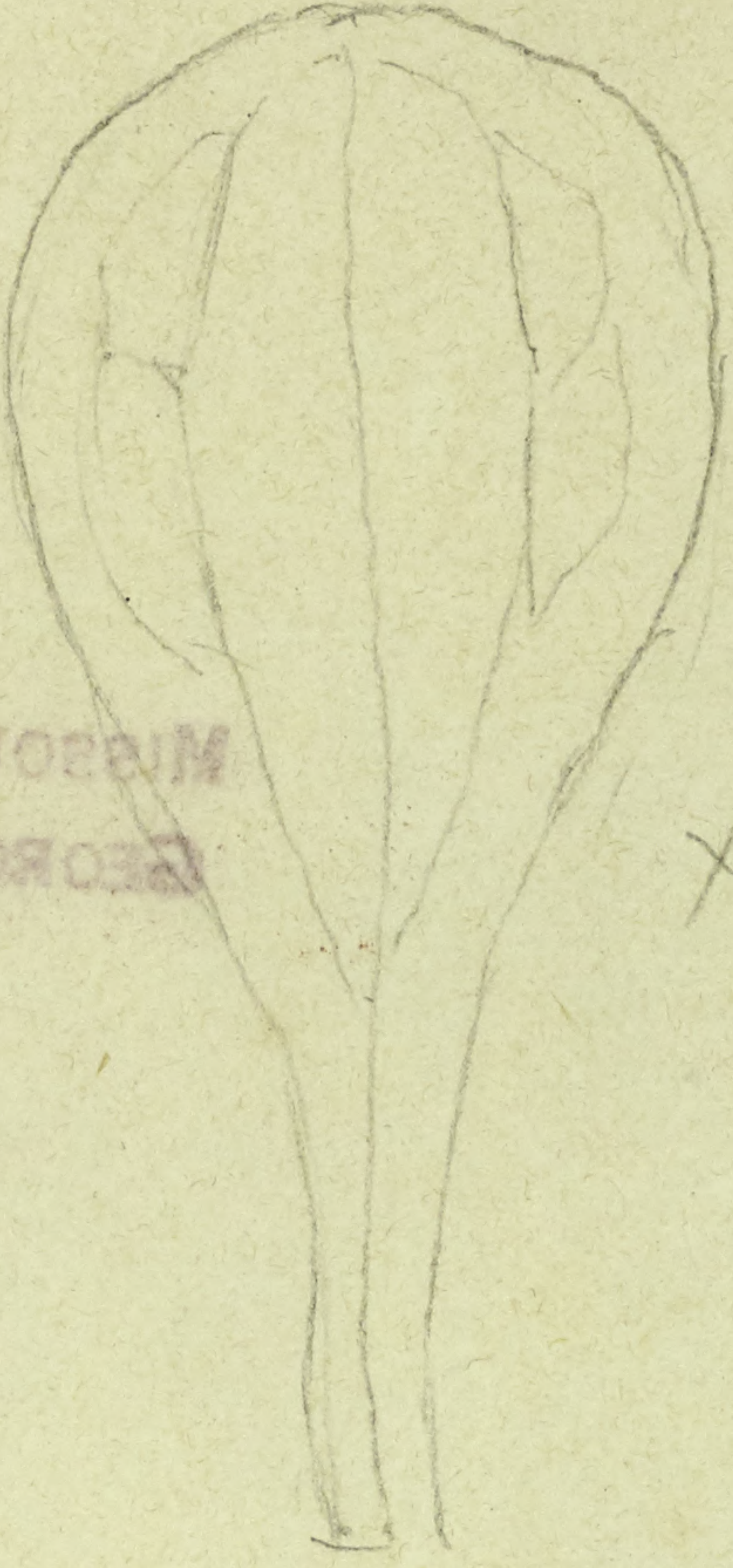
$\frac{22 \times 19}{30} = 0.7 \times 0.6$ mm



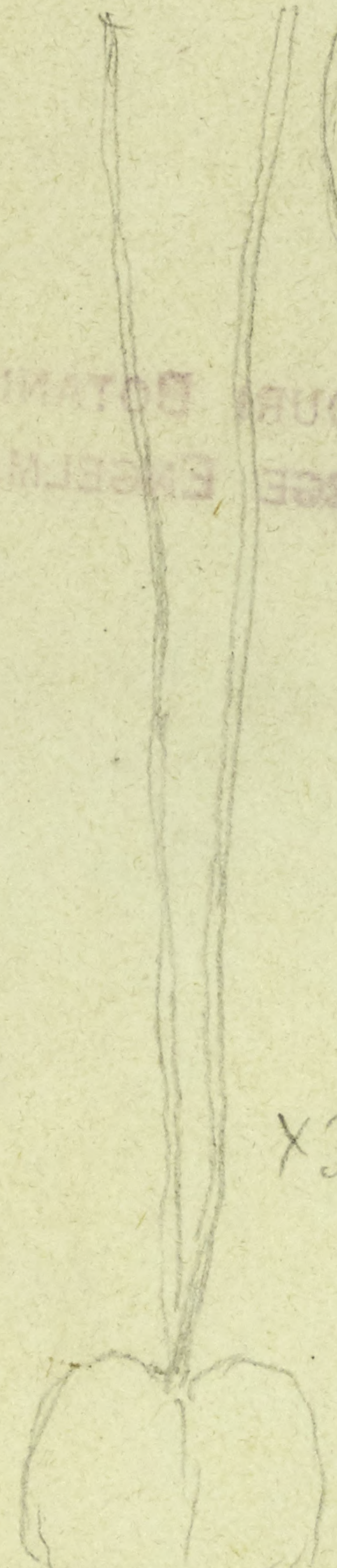
x30







x10



x30

yng fruit

819

CHEMIST
AL

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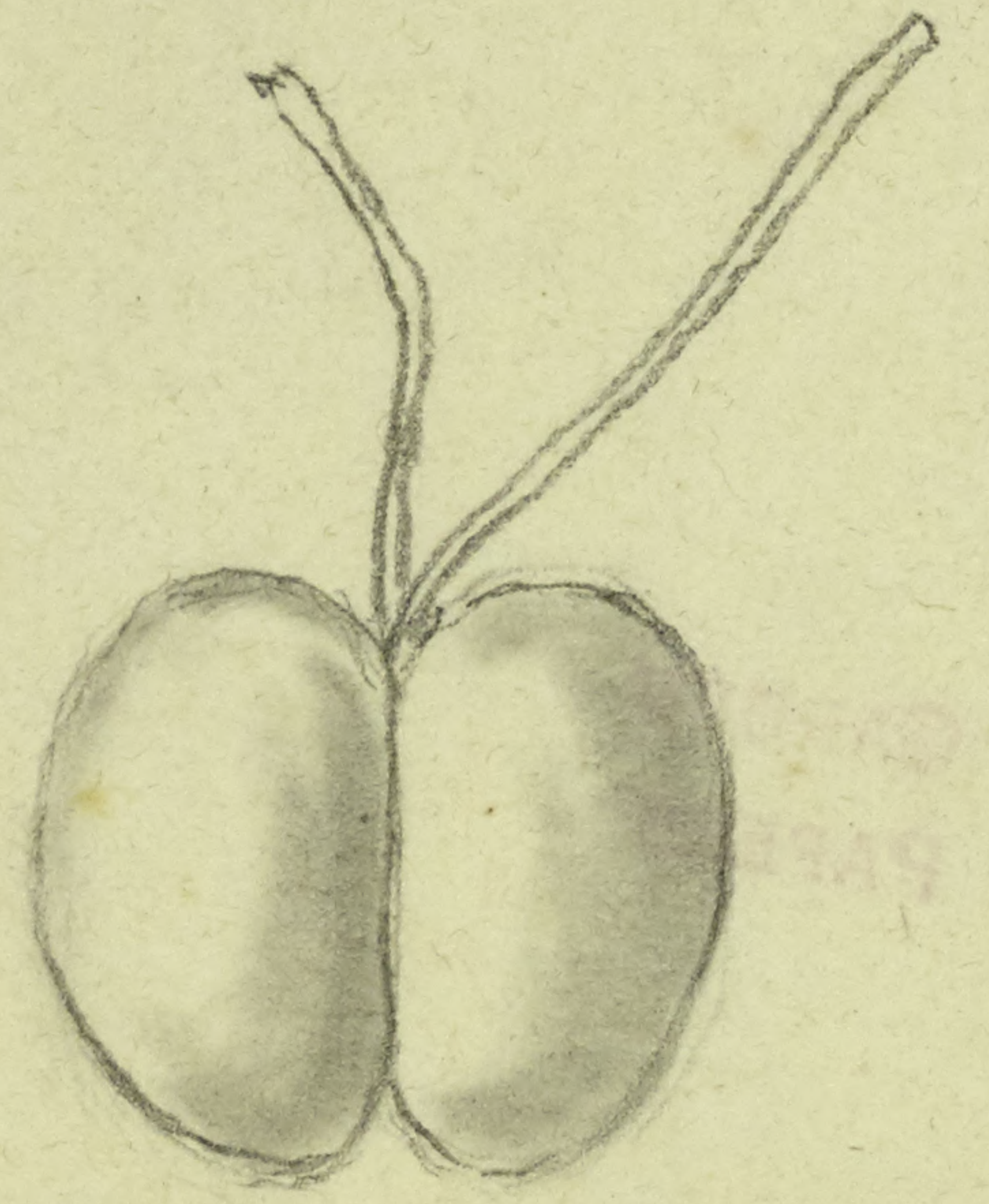
ALL THE NEW REMEDIES CONSTANTLY ON HAND

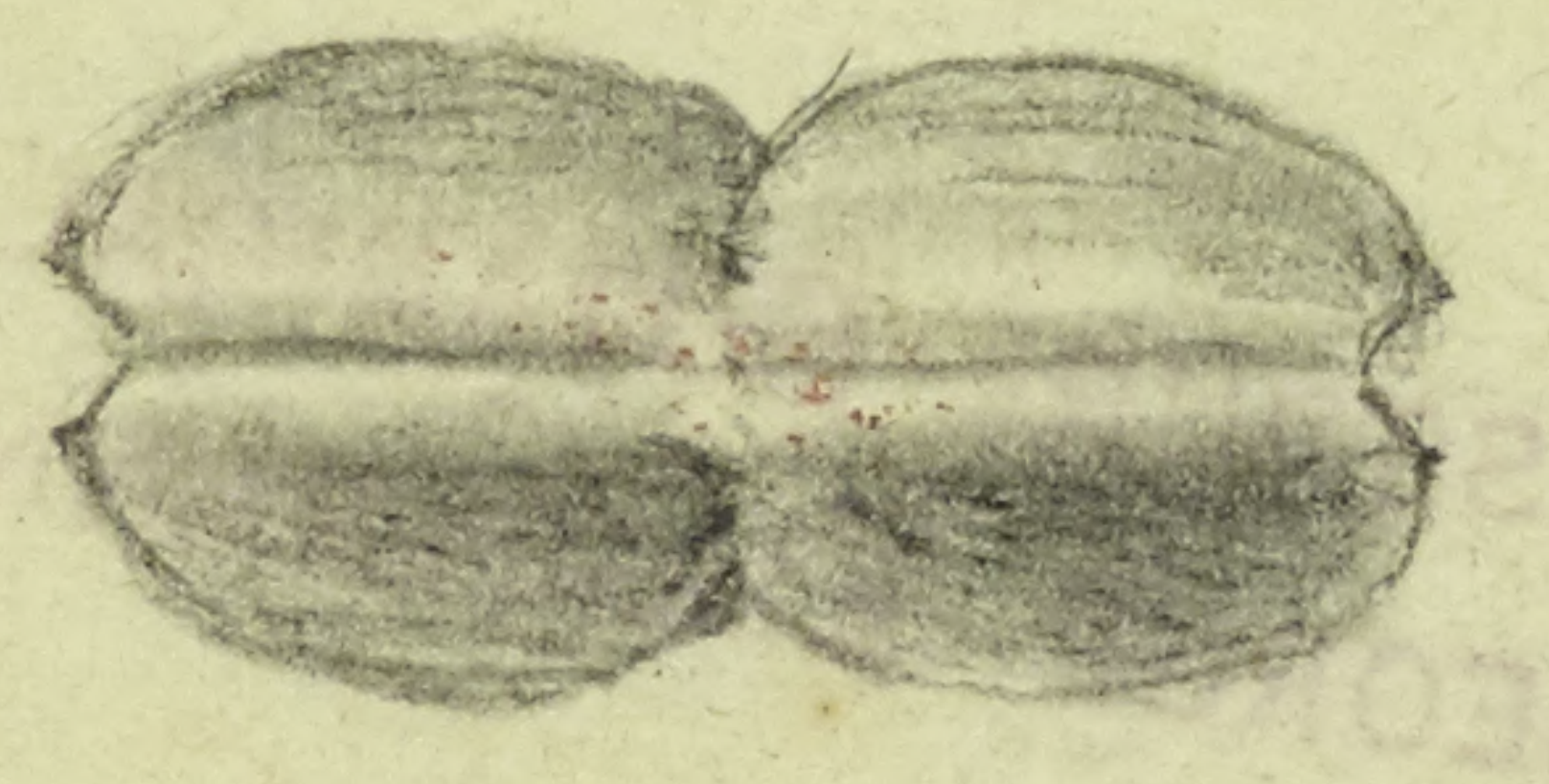
Callitriche Asa Grayi
aquatica latifolia
Athens Ill
E Hall 1861

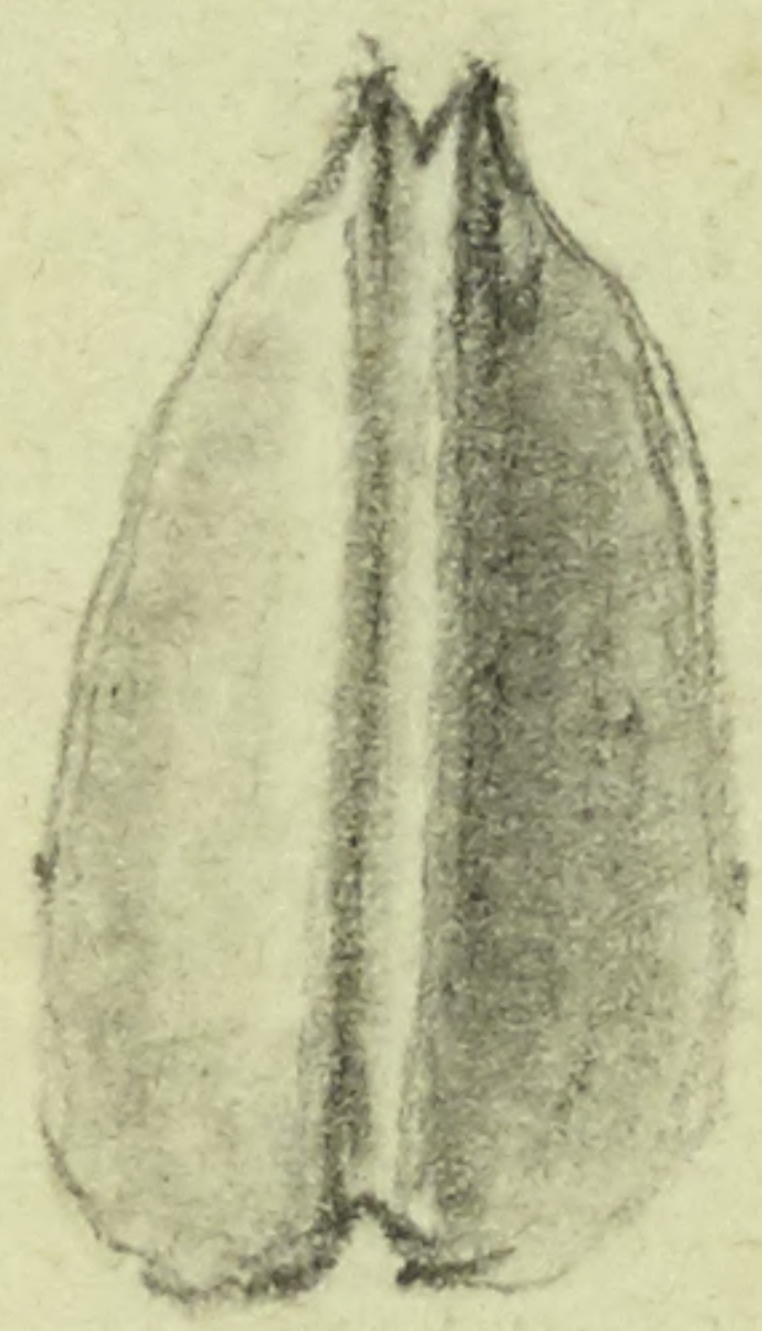
Octob 2d 1864

820

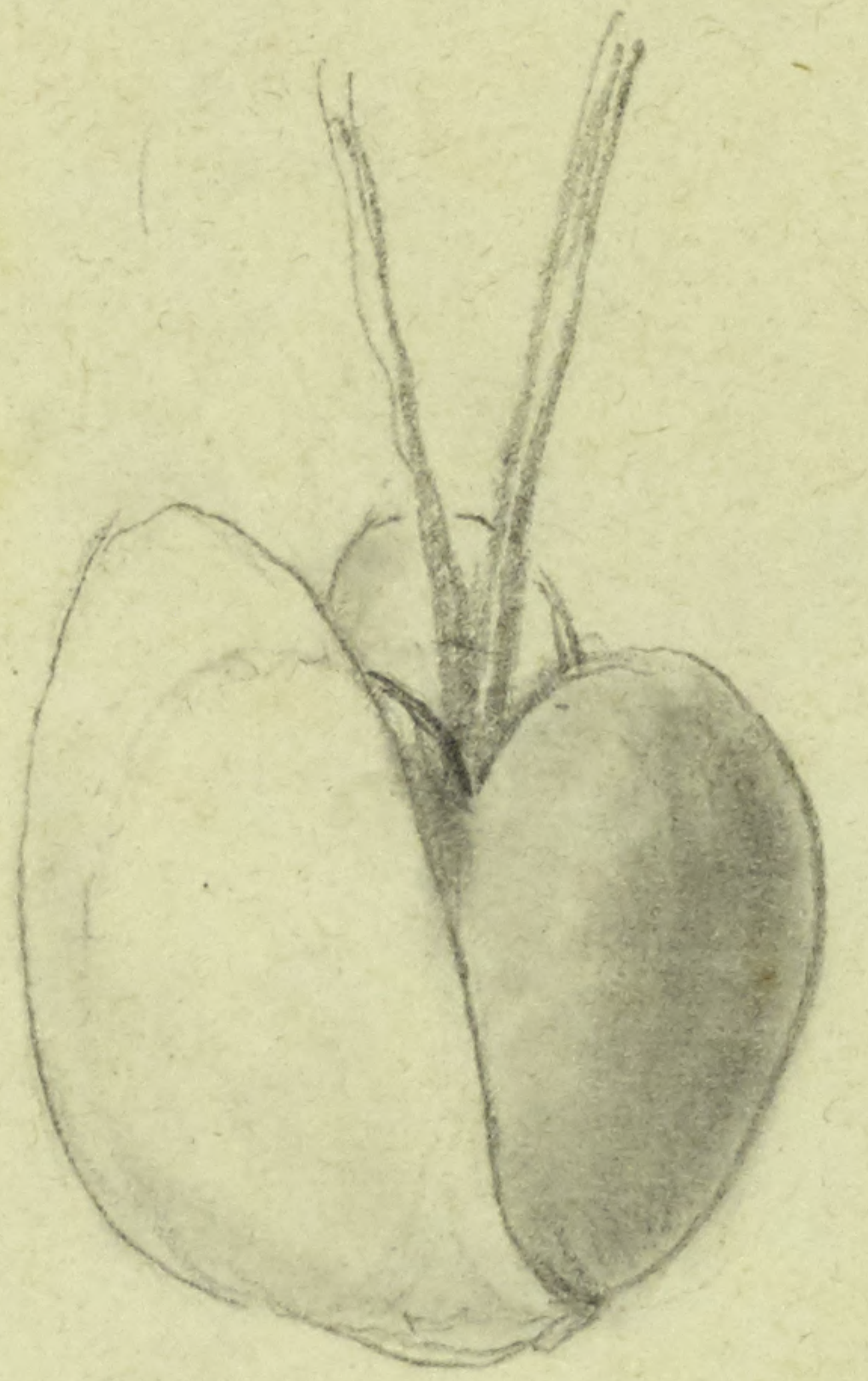
x 30

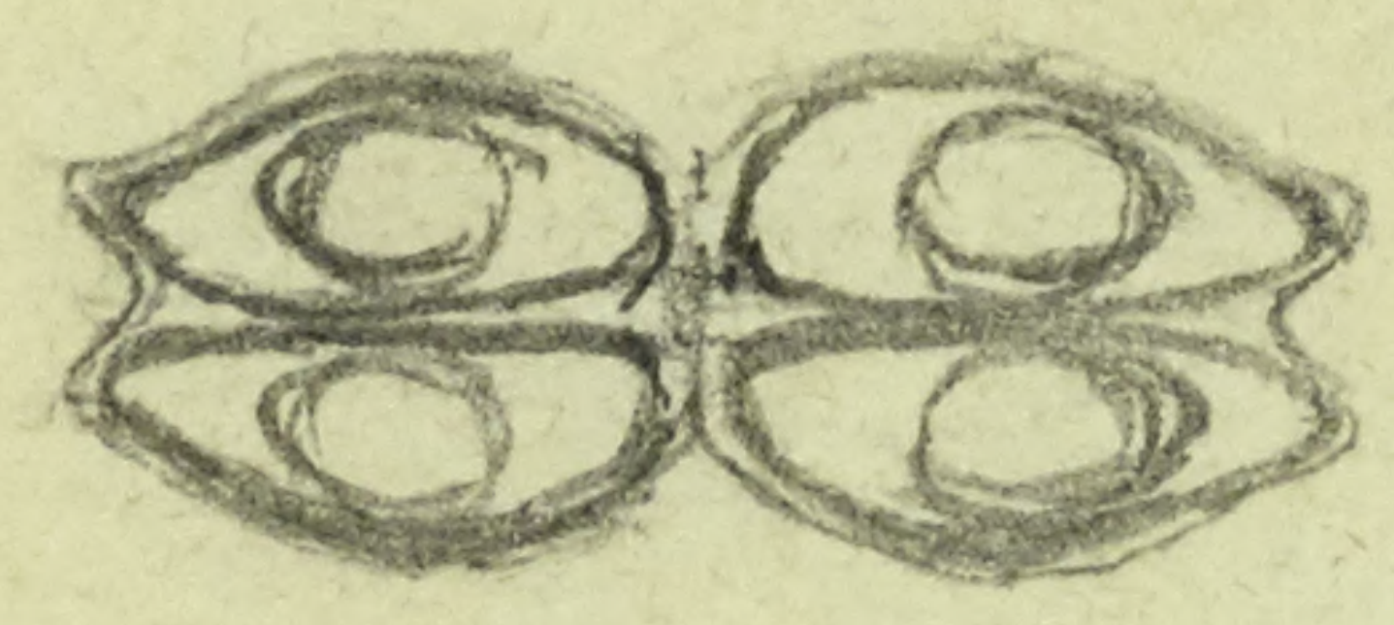






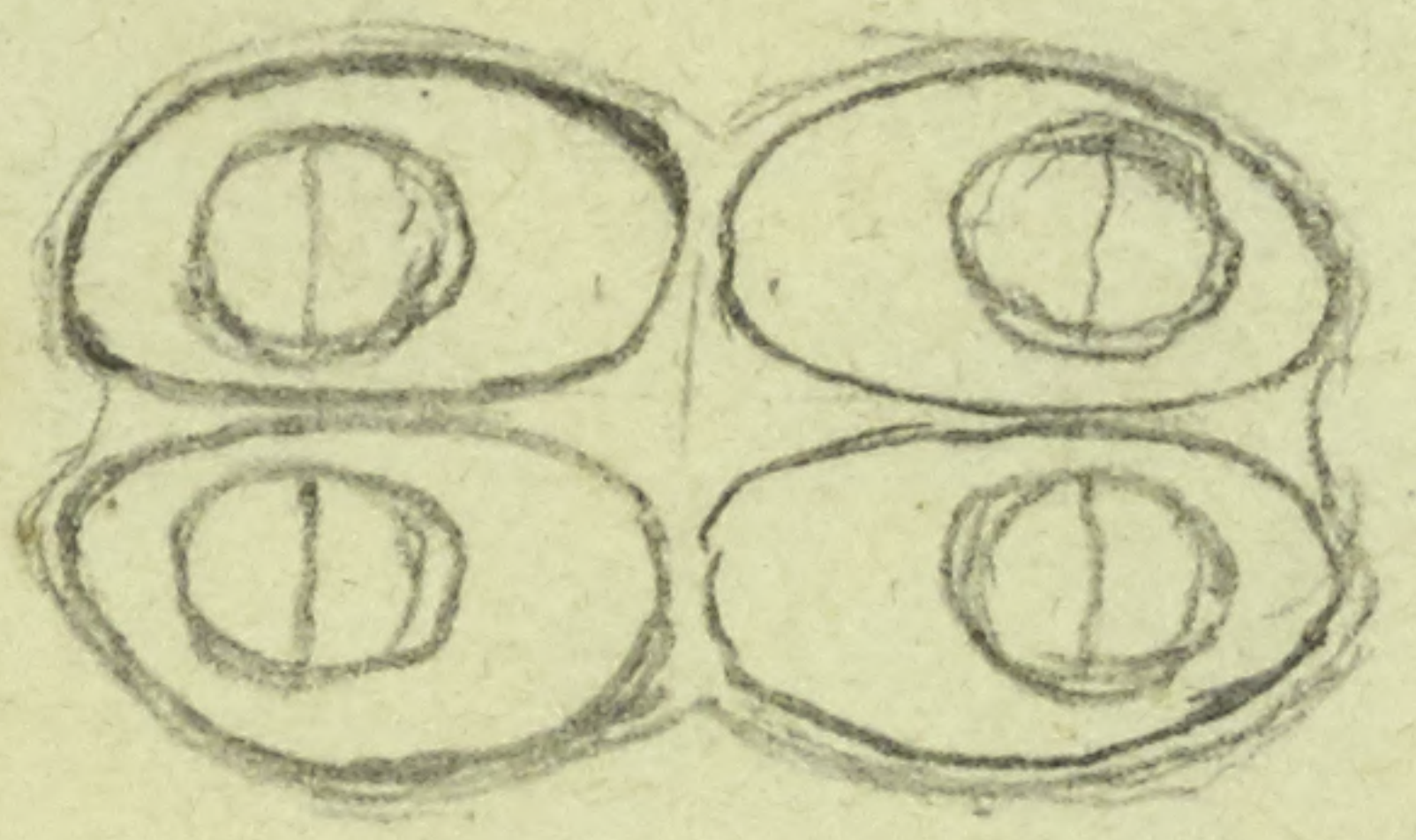
$\frac{22}{30}$ dia = 0.7 mm x 0.6 mm





Sect of upper

upper [illegible] part of



of lower
part of fruit

bracts as well as styles
somewhat persistent

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0 1 2 3 4 5 6 7 8 9 10
cm
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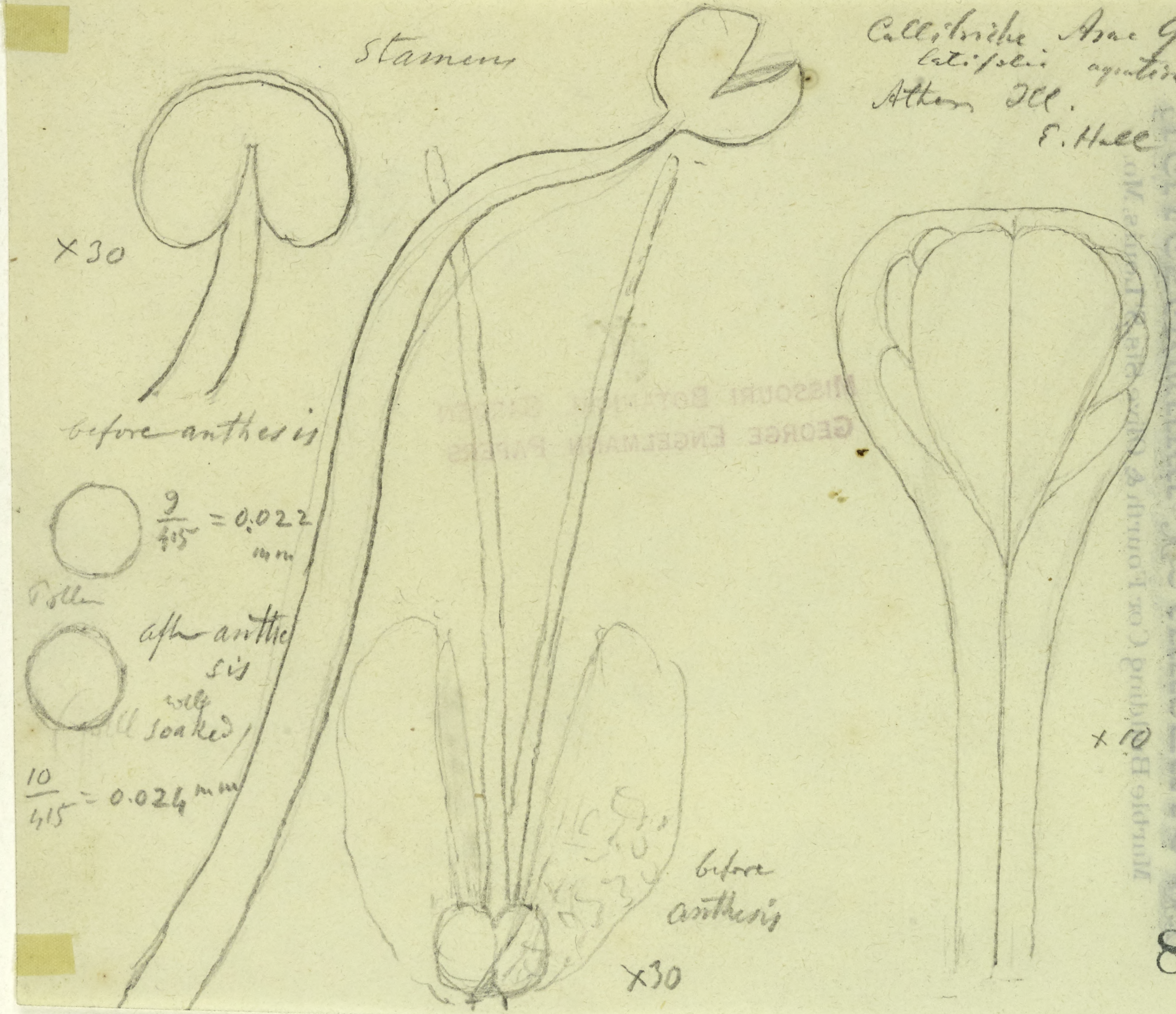
Callitriche Asae Grayi
latifolia aquatica
Athens Ill. Oct 2d 1864
E. Hall 1861


Stamens
×30
before anthesis
$\frac{9}{415}$ = 0.022 mm
Pollen
after anthesis
well soaked
$\frac{10}{415}$ = 0.024 mm
before anthesis
×30
×10

821

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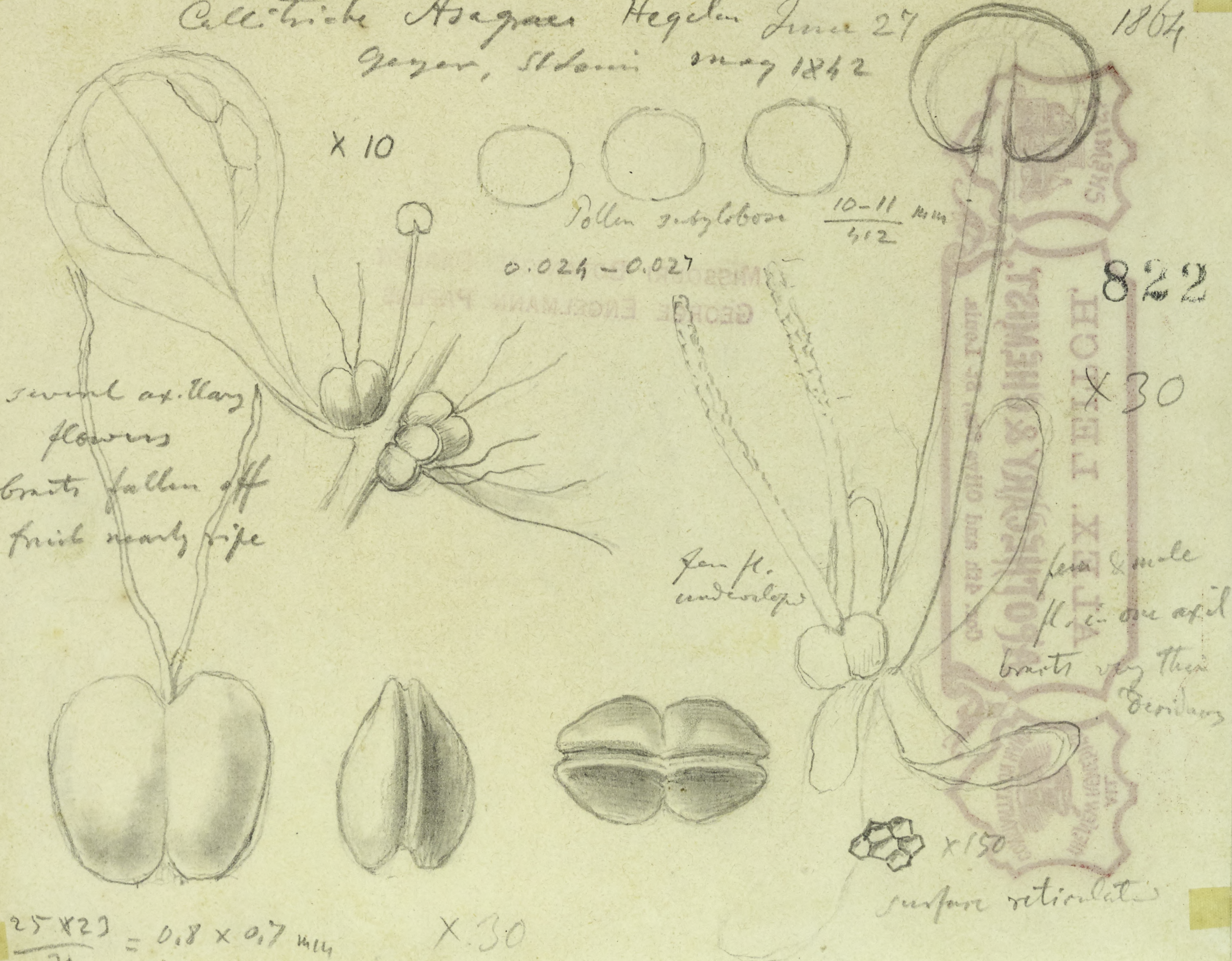
Callitriche Asagraei Hegelm June 27 1864
Geyer, St Louis may 1842

822



x 10

Pollen subglobose $\frac{10-11}{412}$ mm

0.024 – 0.027

X 30

several axillary flowers
bracts fallen off
fruit nearly ripe

fem fl.
undeveloped

fem & male
fl. in one axil
bracts very thin
deciduous

x 150
surface reticulate

$\frac{25 \times 23}{30}$ = 0.8 x 0.7 mm

X 30

CHEMIST
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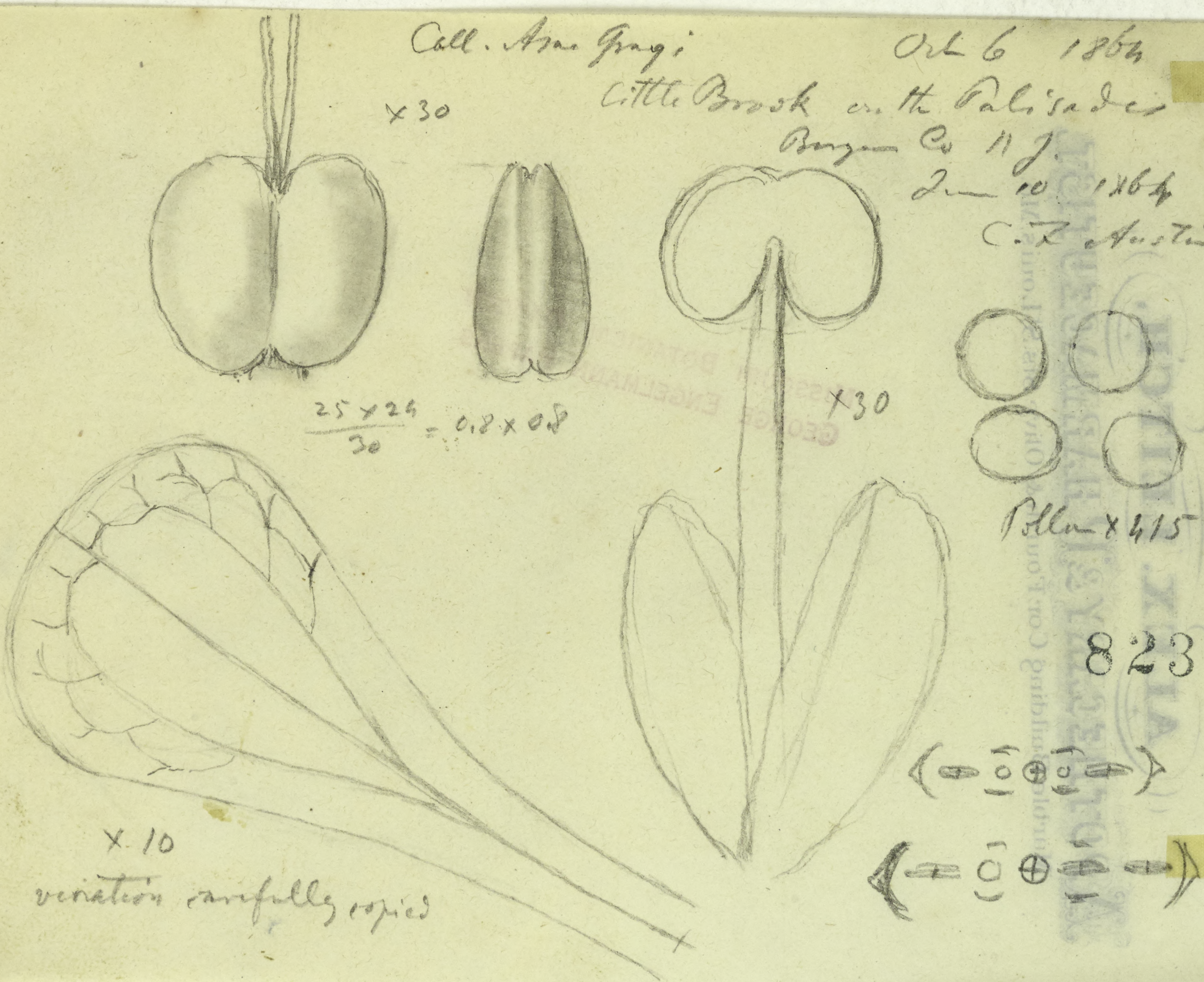
Call. Asa Grayi

Oct 6 1864

Little Brook on the Palisades
Bergen Co N J.
Jun 10 1864
C. F. Austin


x 30
25 x 24 / 30 = 0.8 x 0.8
x 30
Pollen x 415
x 10
venation carefully copied

823

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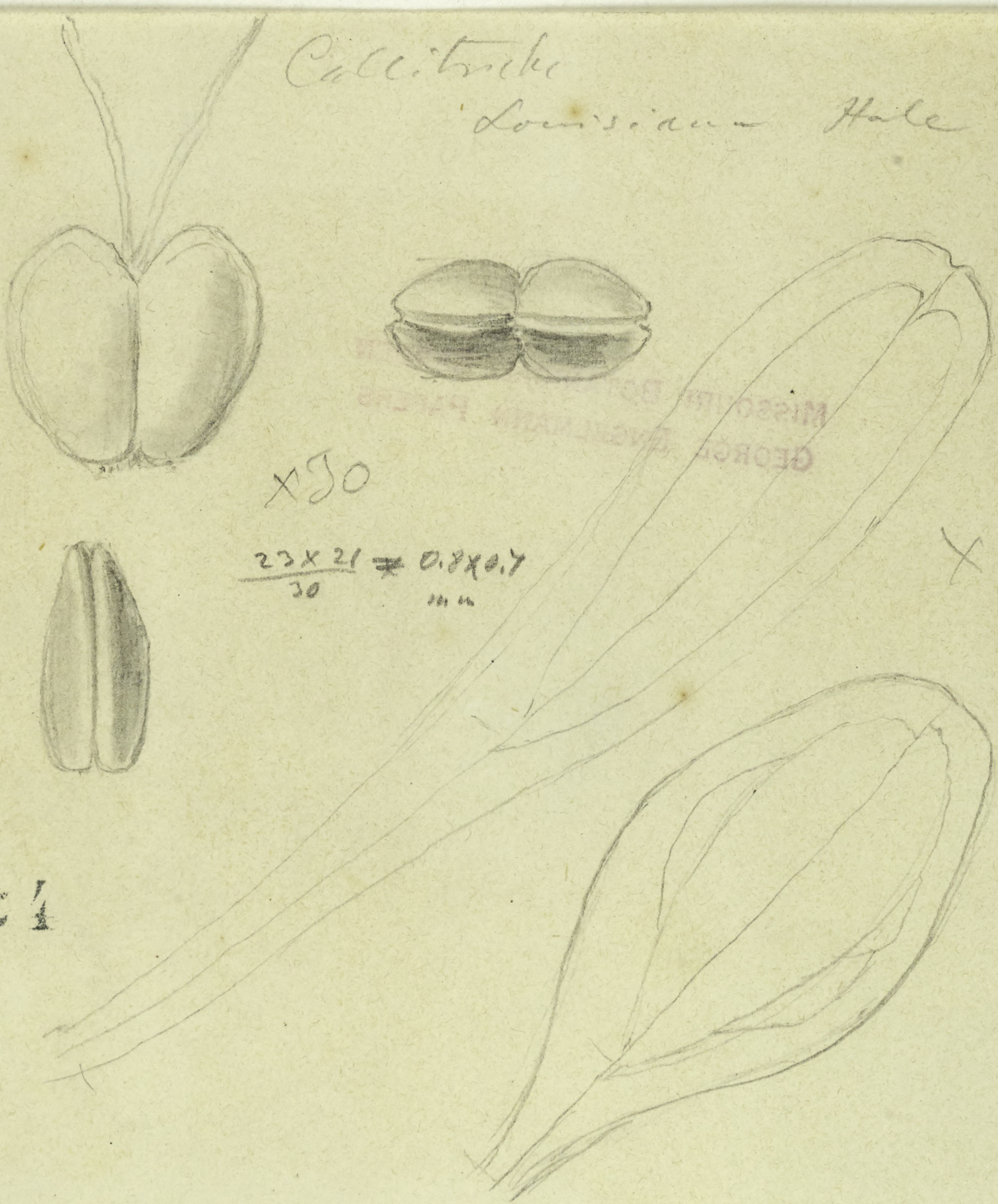
Callitriche

Louisiana Hale

June 27 1864

Herb Engelm & A Gray



×30

$\frac{23 \times 21}{30} = 0.8 \times 0.7$ mm

×10

824

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CHEMIST

A

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cm 0 1 2 3 4 5 6 7 8 9 10
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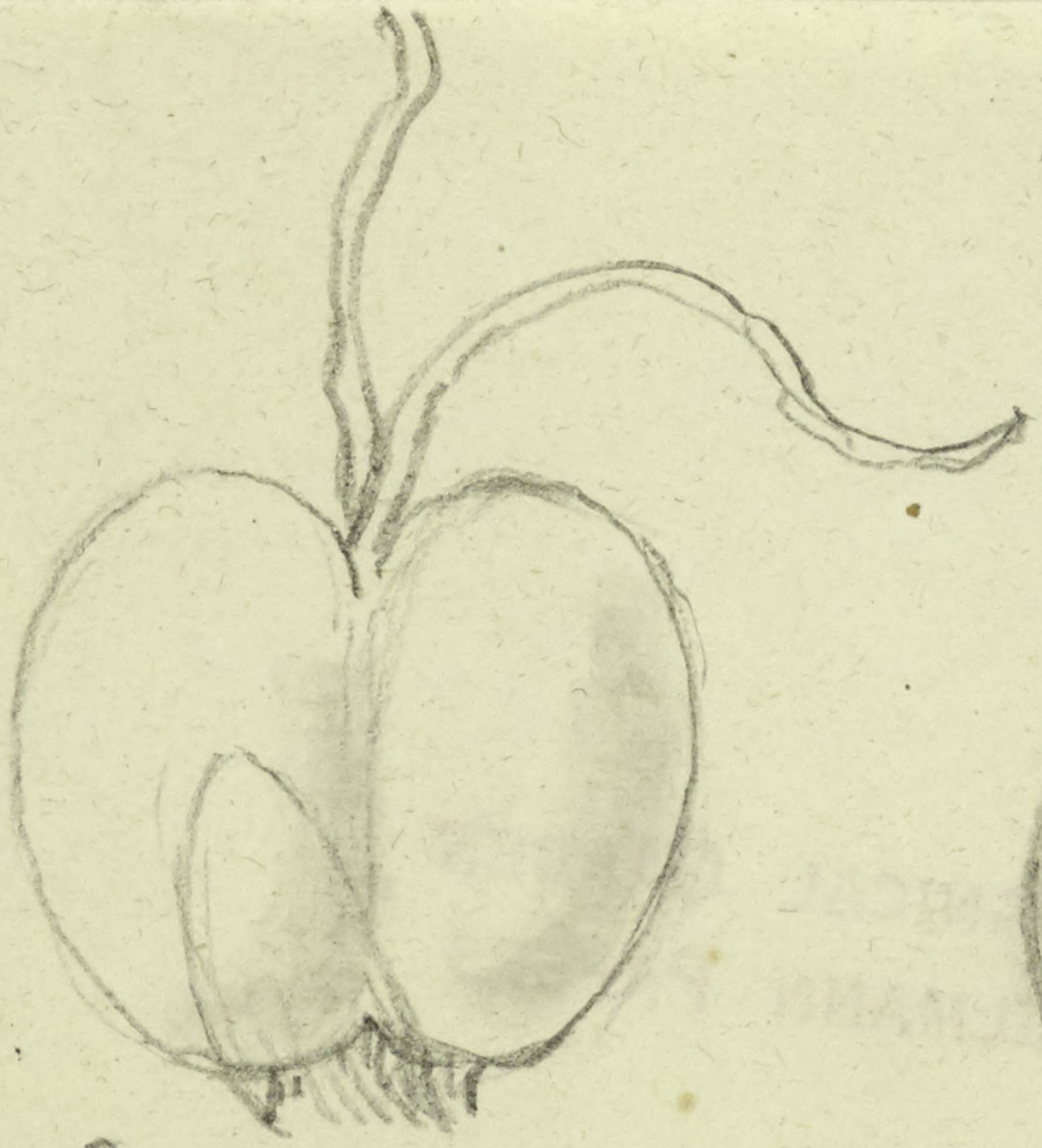
Callitriche Asa Grayi Octob 11 1864

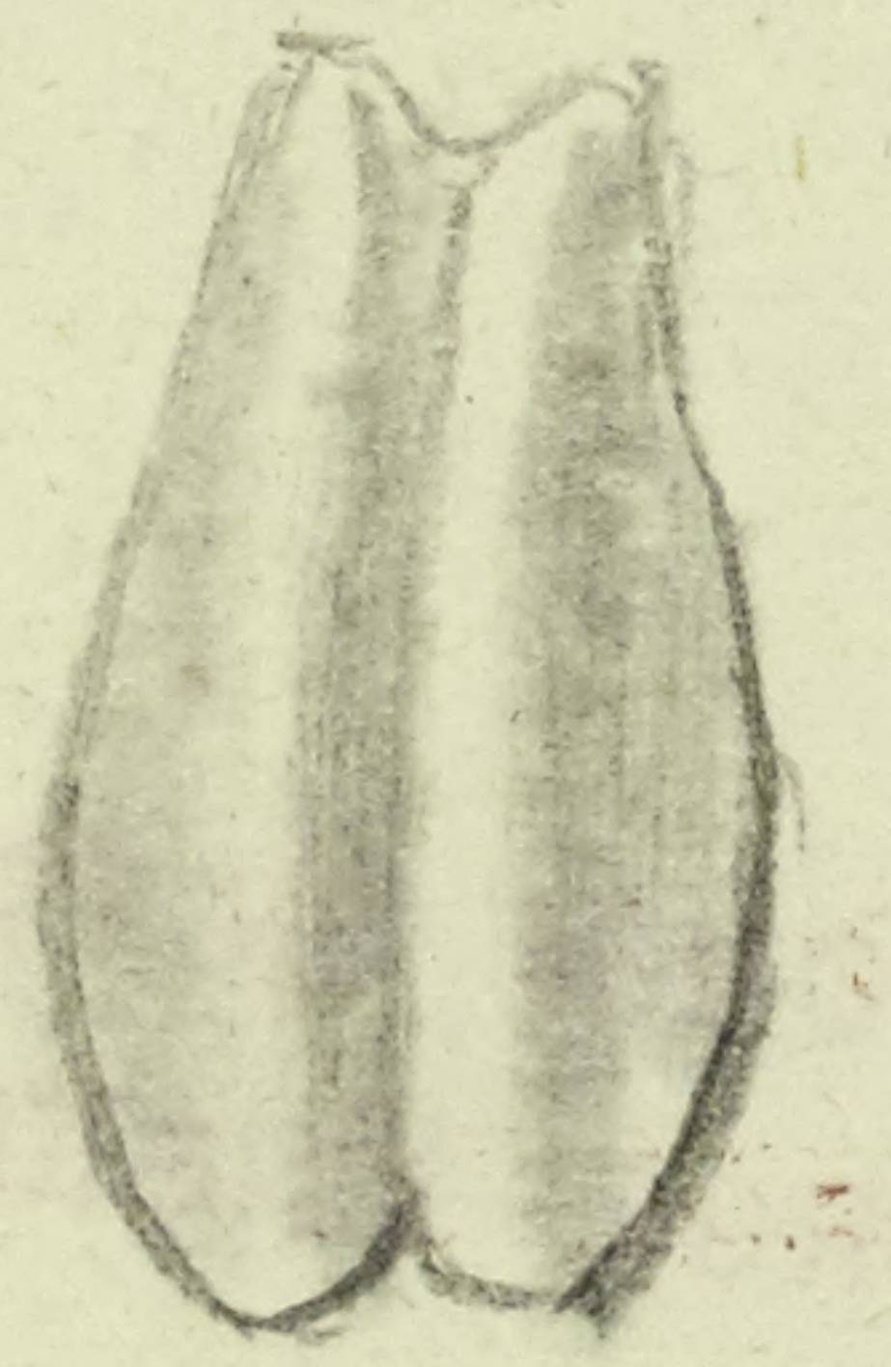
terrestris, Austrata

"Louisiana (Hooker)"
ex Hb A Gray

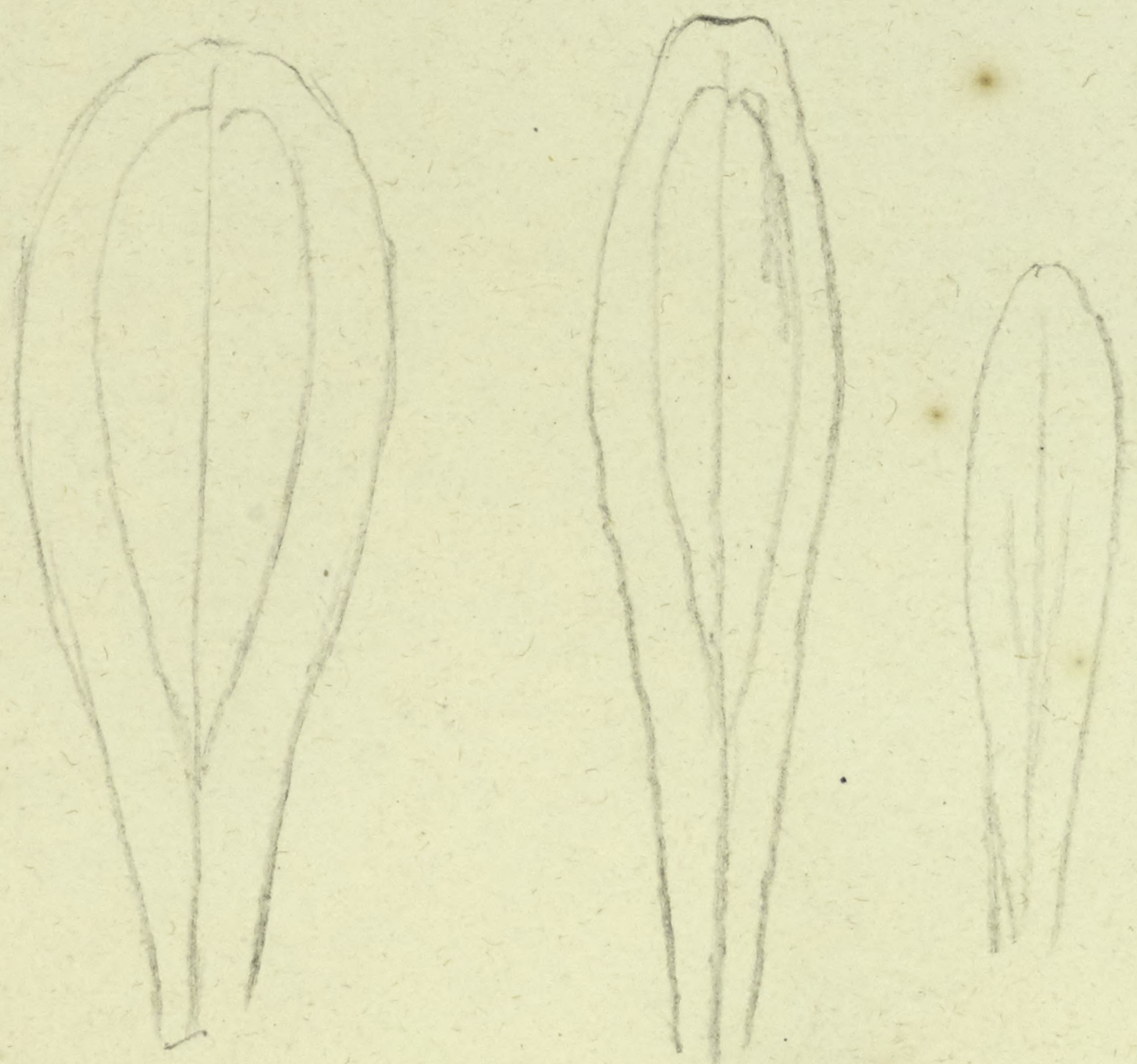
Same as Peck's specim –
Hb Short

825





$\frac{25 \times 22}{30} = 0.8 \times 0.7$



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